

File 411:DIALINDEX(R)

DIALINDEX(R)

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Items	File
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No files have one or more items; file list includes 20 files.

Set	Items	Description
S1	32	AU='YACOBI Y' OR AU='YACOBI YACOV'
S2	58	AU='ENGLAND P':AU='ENGLAND P T' OR AU='ENGLAND PAUL':AU='E- NGLAND PAUL SMITHKLINE BEECHAM PHARMACEUTICAL'
S3	23	AU='YUVAL G' OR AU='YUVAL G A' OR AU='YUVAL GIDEON' OR AU=- 'YUVAL GIDEON A'
S4	110	S1 OR S2 OR S3
S5	12	S4 AND IC=H04N?
S6	0	S1 AND S2 AND S3
S7	0	S4 AND INFORMATION()CONTENT
S8	0	S4 AND PROTECT?()INFORMATION

File 347:JAPIO Oct 1976-2003/Jun(Updated 031006)

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File 348:EUROPEAN PATENTS 1978-2003/Sep W04

(c) 2003 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20031002,UT=20030925

(c) 2003 WIPO/Univentio

File 350:Derwent WPIX 1963-2003/UD,UM &UP=200364

(c) 2003 Thomson Derwent

5/5/1 (Item 1 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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01627167

Methods and systems for cryptographically protecting secure content in  
video memory

Methoden und Systeme zum kryptographischen Schutz von gesichertem Inhalt in  
einem Video-Speicher

Methodes et systemes de protection cryptographique de contenu securise dans  
une memoire video

PATENT ASSIGNEE:

MICROSOFT CORPORATION, (749868), One Microsoft Way, Redmond, WA 98053,  
(US), (Applicant designated States: all)

INVENTOR:

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Peinado, Marcus, 7, 168th Avenue NE, Bellevue, Washington 98008, (US)

Wilt, Nicolas P., 2170 Emerson Street, Palo Alto, California 94301, (US)

LEGAL REPRESENTATIVE:

Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721)  
, Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1343321 A1 030910 (Basic)

APPLICATION (CC, No, Date): EP 2002026416 021126;

PRIORITY (CC, No, Date): US 337617 P 011204; US 339143 P 011210; US 124922  
020418

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;  
IE; IT; LI; LU; MC; NL; PT; SE; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: H04N-007/167 ; H04N-005/913 ; G06F-012/14;  
G06F-001/00; G09G-001/16; H04N-007/24

ABSTRACT EP 1343321 A1

Methods and systems are provided for cryptographically protecting  
secure content in connection with a graphics subsystem of a computing  
device. Techniques are implemented to encrypt the contents of video  
memory so that unauthorized software cannot gain meaningful access to it,  
thereby maintaining confidentiality. Moreover, a mechanism for tamper  
detection is provided so that there is awareness when data has been  
altered in some fashion, thereby maintaining integrity. In various  
embodiments, the contents of overlay surfaces and/or command buffers are  
encrypted, and/or the GPU is able to operate on encrypted content while  
preventing its availability to untrusted parties, devices or software.

ABSTRACT WORD COUNT: 101

NOTE:

Figure number on first page: 3A

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 030910 A1 Published application with search report

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200337	6808
SPEC A	(English)	200337	11645
Total word count - document A			18453
Total word count - document B			0
Total word count - documents A + B			18453

5/5/2 (Item 2 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

01343137

SYSTEM AND METHOD FOR PROTECTING DATA STREAMS IN HARDWARE COMPONENTS

SYSTEM UND VERFAHREN ZUM SCHUTZ VON DATENSTROMEN IN HARDWAREKOMPONENTEN

SYSTEME ET PROCEDE DE PROTECTION DES TRAINS DE DONNEES DANS DES COMPOSANTS  
MATERIELS

PATENT ASSIGNEE:

MICROSOFT CORPORATION, (749866), One Microsoft Way, Redmond, WA 98052,  
(US), (Applicant designated States: all)

INVENTOR:

MALVAR, Henrique, 2302 233rd Avenue N.E., Redmond, WA 98053, (US)

ENGLAND, Paul, 16659 Northrup Way, Bellevue, WA 98008, (US)

LEGAL REPRESENTATIVE:

Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721)  
, Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1258092 A1 021120 (Basic)  
WO 2001061904 010823

APPLICATION (CC, No, Date): EP 2001953044 010117; WO 2001US1683 010117

PRIORITY (CC, No, Date): US 507478 000217

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: H04K-001/02; **H04N-005/00**

CITED PATENTS (WO A): JP 61003542 A ; XP 2171509

CITED REFERENCES (WO A):

US 4188580 A

US 4475208 A

PATENT ABSTRACTS OF JAPAN vol. 010, no. 141 (E-406), 24 May 1986

(1986-05-24) & JP 61 003542 A (SONY KK), 9 January 1986 (1986-01-09)

"Introduction to DirectShow" MICROSOFT DIRECTX, Online 27 September  
1999 (1999-09-27), XP002171509 Retrieved from the Internet:

<URL:http://www.microsoft.com/products/Dev

eloper/devonly/PRODINFO/directx/dxm/help/d s/default.htm> retrieved on

2001-07-09 ;

NOTE:

No A-document published by EPO

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 011017 A1 International application. (Art. 158(1))

Application: 011017 A1 International application entering European  
phase

Application: 021120 A1 Published application with search report

Examination: 021120 A1 Date of request for examination: 20020731

LANGUAGE (Publication,Procedural,Application): English; English; English

5/5/3 (Item 3 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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01296483

**METHODS AND SYSTEMS FOR FINGERPRINTING DIGITAL DATA**

**VERFAHREN UND VORRICHTUNGEN FUR FINGERABDRUCKE DIGITALER DATEN**

**PROCEDES ET SYSTEMES PERMETTANT UN FILIGRANAGE DE DONNEES NUMERIQUES**

PATENT ASSIGNEE:

MICROSOFT CORPORATION, (749861), One Microsoft Way, Redmond, Washington  
98052-6399, (US), (Applicant designated States: all)

INVENTOR:

YACOBI, Yacov, 5050 West Mercer Way, Mercer Island, WA 98040, (US)

LEGAL REPRESENTATIVE:

Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721)  
, Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1243126 A1 020925 (Basic)  
WO 2001031910 010503

APPLICATION (CC, No, Date): EP 2000974015 001027; WO 2000US29843 001027

PRIORITY (CC, No, Date): US 437713 991028

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: **H04N-001/32**

CITED PATENTS (WO A): XP 199950 ; XP 533644

CITED REFERENCES (WO A):

EP 951183 A

WO 9734391 A

US 5930369 A

COX I J ET AL: "SECURE SPREAD SPECTRUM WATERMARKING FOR MULTIMEDIA" IEEE TRANSACTIONS ON IMAGE PROCESSING,US,IEEE INC. NEW YORK, vol. 6, no. 12, 1 December 1997 (1997-12-01), pages 1673-1687, XP000199950 ISSN: 1057-7149

BONEH D ET AL: "COLLUSION-SECURE FINGERPRINTING FOR DIGITAL DATA" PROCEEDINGS OF THE ANNUAL INTERNATIONAL CRYPTOLOGY CONFERENCE (CRYPTO),DE,BERLIN, SPRINGER, vol. CONF. 15, 27 August 1995 (1995-08-27), pages 452-465, XP000533644 ISBN: 3-540-60221-6;

NOTE:

No A-document published by EPO

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 010627 A1 International application. (Art. 158(1))

Application: 010627 A1 International application entering European phase

Application: 020925 A1 Published application with search report

Examination: 020925 A1 Date of request for examination: 20020418

Examination: 030115 A1 Date of dispatch of the first examination report: 20021203

LANGUAGE (Publication,Procedural,Application): English; English; English

5/5/4 (Item 4 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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00719917

**System and method for inserting data into a video signal**

**System und Verfahren zum Einfügen von Daten in ein Videosignal**

**Systeme et methode pour inserer des donnees dans un signal video**

PATENT ASSIGNEE:

MICROSOFT CORPORATION, (749861), One Microsoft Way, Redmond, Washington 98052-6399, (US), (Proprietor designated states: all)

INVENTOR:

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Myhrvold, Nathan P., 3441 134th Avenue Northeast, Bellevue, Washington 98005, (US)

**Yuval, Gideon A.** , 7660 81st Place Southeast, Mercer Island, Washington 98040, (US)

LEGAL REPRESENTATIVE:

Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721) , Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 681402 A2 951108 (Basic)

EP 681402 A3 980708

EP 681402 B1 020213

APPLICATION (CC, No, Date): EP 95106568 950502;

PRIORITY (CC, No, Date): US 237265 940503

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: **H04N-007/08**

CITED PATENTS (EP B): WO 89/06469 A; US 4660072 A; US 5461426 A

ABSTRACT EP 681402 A2

A system and method for modulating a data signal uses a phase shifting transformer function to phase shift the lower and upper sidebands of the data signal so that the sidebands of the data signal have a 180(degree) phase shift with respect to each other. (i.e., are complementary). The phase shifted sidebands are added to a standard video signal and then transmitted. A television or other video receiver demodulates the video signal with a simple demodulator circuit, which causes the upper and lower sidebands to be summed together. The data signal, with complementary sidebands, cancels out so that the data signal does not interfere with normal video operation. The upper and lower sidebands of the data signal are processed separately from the video processing circuitry of the television receiver. An inverse phase shifting circuit performs a second phase shift operation on the upper and lower sidebands of the data signal so that the data signal can be demodulated and the

data signal recovered. (see image in original document)  
ABSTRACT WORD COUNT: 170

NOTE:

Figure number on first page: 6

LEGAL STATUS (Type, Pub Date, Kind, Text):

Grant: 020213 B1 Granted patent  
Application: 951108 A2 Published application (A1with Search Report  
;A2without Search Report)  
Oppn None: 030205 B1 No opposition filed: 20021114  
Search Report: 980708 A3 Separate publication of the European or  
International search report  
Examination: 990310 A2 Date of filing of request for examination:  
981231  
Examination: 991229 A2 Date of dispatch of the first examination  
report: 19991115

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	1272
CLAIMS B	(English)	200207	1105
CLAIMS B	(German)	200207	1050
CLAIMS B	(French)	200207	1225
SPEC A	(English)	EPAB95	4734
SPEC B	(English)	200207	4848
Total word count - document A			6007
Total word count - document B			8228
Total word count - documents A + B			14235

5/5/5 (Item 5 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00719916

**System and method for inserting data into a video signal.**

**System und Verfahren zum Einfügen von Daten in ein Videosignal.**

**Systeme et methode pour inserer des donnees dans un signal video.**

PATENT ASSIGNEE:

MICROSOFT CORPORATION, (749861), One Microsoft Way, Redmond, Washington  
98052-6399, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

Myhrvold, Nathan P., 3441 134th Avenue Northeast, Bellevue, Washington  
98005, (US)  
Yuval, Gideon A. , 7660 81st Place Southeast, Mercer Island, Washington  
98040, (US)  
Kim, William E., 15127 Northeast 24th Street #264, Redmond, Washington  
98052-5544, (US)

LEGAL REPRESENTATIVE:

Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721)  
, Maximilianstrasse 58, D-80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 681401 A2 951108 (Basic)  
EP 681401 A3 980708

APPLICATION (CC, No, Date): EP 95106567 950502;

PRIORITY (CC, No, Date): US 254363 940503

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: H04N-007/08

ABSTRACT EP 681401 A2

A system and method for inserting a data signal into a preexisting video signal in a transmitter so that the data signal is transmitted along with the video signal. The data signal is inserted into an unused portion of the video signal spectrum. The data signal is separated from the video signal in a receiver and may be used for any purpose, even purposes unrelated to the video signal. The data signal is filtered to create a filtered data signal having spectral characteristics that correspond to the unused portion of the video signal spectrum. The

filtered signal modulates a carrier signal whose frequency is selected to permit direct insertion of the modulated filtered data signal into the video signal spectrum. In the receiver, the video signal is processed in a normal manner; and the data signal is undetected by normal television receivers. A signal separator separates the filtered data signal from the combined video signal, and an inverse filter recovers the original data signal. In one embodiment, a comb filter is used to generate the filtered data signal with 60 Hertz peaks. An inverse comb filter in the receiver recovers the original data signal. A recirculating buffer may also be used to generate the filtered data signal. (see image in original document)

ABSTRACT WORD COUNT: 214

LEGAL STATUS (Type, Pub Date, Kind, Text):

Examination: 20000105 A2 Date of dispatch of the first examination  
report: 19991117  
Application: 951108 A2 Published application (A1with Search Report  
;A2without Search Report)  
Search Report: 980708 A3 Separate publication of the European or  
International search report  
Examination: 990310 A2 Date of filing of request for examination:  
981231

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	1777
SPEC A	(English)	EPAB95	4692
Total word count - document A			6469
Total word count - document B			0
Total word count - documents A + B			6469

5/5/6 (Item 1 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00828328 \*\*Image available\*\*

**SYSTEM AND METHOD FOR PROTECTING DATA STREAMS IN HARDWARE COMPONENTS**  
**SYSTEME ET PROCEDE DE PROTECTION DES TRAINS DE DONNEES DANS DES COMPOSANTS**  
**MATERIELS**

Patent Applicant/Assignee:

MICROSOFT CORPORATION, One Microsoft Way, Redmond, WA 98052, US,  
(Residence), US (Nationality)

Inventor(s):

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**ENGLAND Paul**, 16659 Northrup Way, Bellevue, WA 98008, US

Legal Representative:

LEE Lewis C (et al) (agent), 421 W. Riverside Avenue, Suite 500, Spokane,  
WA 99201, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200161904 A1 20010823 (WO 0161904)  
Application: WO 2001US1683 20010117 (PCT/WO US0101683)  
Priority Application: US 2000507478 20000217

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ

DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ  
LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG  
SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: H04K-001/02

International Patent Class: **H04N-005/00**

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims  
Fulltext Word Count: 7855

#### English Abstract

A scrambling architecture protects data streams in the operating system and hardware components of a computer by scrambling the otherwise raw data prior to the data being handled by the operating system. The architecture has a scrambler implemented at either the client or the server that adds noise to the content. More specifically, the scrambler produces periodic sets of tone patterns having varying amplitudes based on a first key. The scrambler also generates a random signal based on a first key and a second key. The tone patterns and random signal are added to the content to scramble the content. The scrambled content is then passed to the filter graph. The descrambler detects the tone patterns in the content and recovers the first key from the varying amplitudes of the tone patterns. The descrambler also receives the second key via a separate channel (e.g., a cryptographically secured path) and generates the same random signal using the recovered first key and the second key. The descrambler subtracts the tone patterns and the random signal from the scrambled content.

#### French Abstract

La presente invention concerne une architecture de brouillage protegeant les trains de donnees dans le systeme d'exploitation et les composants materiels d'un ordinateur. Il s'agit de brouiller des donnees brutes avant leur manipulation par le systeme d'exploitation. On dispose a cet effet au niveau du client ou du serveur d'un brouilleur ajoutant du bruit au contenu. De facon plus specifique, le brouilleur produit des ensembles periodiques de structures sonores dont les amplitudes varient sur la base d'une premiere cle. Le brouilleur produit egalement un signal aleatoire sur la base de la premiere cle et d'une seconde cle. Les structures sonores et le signal aleatoire ajoutees au contenu viennent le brouiller. Le contenu brouille est alors remis brouille pour traitement au graphe a filtre. Ce desembrouilleur recherche dans le contenu les structures sonores et reconstruit la premiere cle sur la base de leurs variations d'amplitude. Il recoit egalement la seconde cle via un canal separe, tel qu'un chemin securise par cryptographie, puis produit le meme signal aleatoire sur la base de la premiere cle retablie et de la seconde cle pour. Pour restituer le contenu, le desembrouilleur elimine du contenu brouille les structures sonores.

#### Legal Status (Type, Date, Text)

Publication 20010823 A1 With international search report.

Publication 20010823 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

Examination 20011115 Request for preliminary examination prior to end of 19th month from priority date

5/5/7 (Item 2 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00798306 \*\*Image available\*\*

#### **METHODS AND SYSTEMS FOR FINGERPRINTING DIGITAL DATA PROCEDES ET SYSTEMES PERMETTANT UN FILIGRANAGE DE DONNEES NUMERIQUES**

Patent Applicant/Assignee:

MICROSOFT CORPORATION, One Microsoft Way, Redmond, WA 98052-6399, US, US  
(Residence), US (Nationality)

Inventor(s):

**YACOBI Yacov**, 5050 West Mercer Way, Mercer Island, WA 98040, US

Legal Representative:

SADLER Lance R (et al) (agent), Suite 500, 421 W. Riverside Avenue,  
Spokane, WA 99201, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200131910 A1 20010503 (WO 0131910)



Application: WO 2000US29843 20001027 (PCT/WO US0029843)

Priority Application: US 99437713 19991028

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ  
DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ  
LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG  
SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: H04N-001/32

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 10689

#### English Abstract

Methods and systems for fingerprinting digital data are described. In the described embodiment, Direct Sequence Spread Spectrum (DSSS) technology is utilized. Unique fingerprinting words are defined where each includes at least one spread sequence. In the described embodiment, a fingerprinting word comprises a plurality symbols, called "Gamma symbols". Each Gamma symbol is composed of  $2c-1$  blocks, where  $c$  represents the number of colluders that are desired to be protected against. Each block contains  $d$  spread sequence chips. The fingerprinting words are assigned to a plurality of entities to which protected objects embedded with the fingerprinting words are to be distributed. To ascertain the identity of an entity that has altered its unique fingerprinting word, the relative weight of each block is computed in accordance with a defined function and blocks whose weights satisfy a predetermined relationship are "clipped" to a so-called working range. Each Gamma-symbol of the altered fingerprinting word is then processed to produce a set of one or more colors that might be the subject of a collusion. Each Gamma-symbol in the fingerprinting word for each entity is then evaluated against a corresponding produced set and the entity having the most overall Gamma-symbol coincidences is incriminated.

#### French Abstract

Cette invention a trait a des procedes et systemes permettant un filigranage de donnees numeriques. On utilise, dans le mode de realisation decrit, la technologie DSSS (spectre disperse avec sequences continues). Des mots de filigranage unique sont definis, comportant chacun au moins une sequence d'etalement. Dans ce mode de realisation, un mot de filigranage comporte plusieurs symboles nommes  $\leq$  symboles Gamma  $\geq$ . Chacun de ces symboles Gamma se compose de  $2c-1$  blocs,  $c$  representant le nombre de personnes de connivence contre lesquelles on desire se proteger. Chaque bloc contient  $d$  fragments de sequence d'etalement. Les mots de filigranage sont attribues a plusieurs entites destinataires des objets proteges dans lesquels ont ete incorpores des mots de filigranage. On calcule, afin d'etablir avec precision l'identite d'une entite ayant modifie son mot de filigranage unique, le poids relatif de chaque bloc conformement a une fonction definie et les blocs dont les poids repond a une relation predeterminee sont  $\leq$  decoupees  $\geq$  jusqu'a ce que l'on nomme une valeur de plage demesure. Chaque symbole Gamma du mot de filigranage modifie est ensuite traite afin de produire un ensemble constitue d'une ou de plusieurs couleurs susceptibles de faire l'objet d'une collusion. Chaque symbole Gamma du mot de filigranage relatif a chaque entite est ensuite confronte a un ensemble correspondant produit et l'entite possedant le plus de coincidences de symboles Gamma dans l'ensemble est incriminee.

Legal Status (Type, Date, Text)

Publication 20010503 A1 With international search report.

Publication 20010503 A1 Before the expiration of the time limit for amending the claims and to be republished in the

event of the receipt of amendments.  
Examination 20011129 Request for preliminary examination prior to end of  
19th month from priority date

5/5/8 (Item 1 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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014571871 \*\*Image available\*\*  
WPI Acc No: 2002-392575/200242  
Related WPI Acc No: 2000-611744; 2000-647267; 2000-647268; 2001-090815;  
2001-191170; 2001-210824; 2001-210825; 2002-279866; 2002-350656;  
2003-522656  
XRPX Acc No: N02-307704

Computing device with video card, has video random access memory which is  
configured with write-only function except with regards to video section

Patent Assignee: MICROSOFT CORP (MICT )  
Inventor: ENGLAND P ; PEINADO M; SANKARANARAYAN M  
Number of Countries: 029 Number of Patents: 004  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020012432	A1	20020131	US 99126614	P	19990327	200242 B
			US 2001892298	A	20010628	
EP 1271280	A2	20030102	EP 200214340	A	20020627	200310
CN 1393783	A	20030129	CN 2002124782	A	20020625	200334
JP 2003122636	A	20030425	JP 2002186968	A	20020626	200337

Priority Applications (No Type Date): US 99126614 P 19990327; US 2001892298  
A 20010628

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020012432	A1		38	H04N-007/167	Provisional application US 99126614

EP 1271280 A2 E G06F-001/00  
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT  
LI LT LU LV MC MK NL PT RO SE SI TR  
CN 1393783 A G06F-012/14  
JP 2003122636 A 38 G06F-012/14

Abstract (Basic): US 20020012432 A1

NOVELTY - A digital rights management (DRM) system (32) allows  
rendering of protected digital content (12) with a type of content to  
be displayed on a monitor (64) coupled to the computing device. A video  
card (60) receiving the content in a non-protected form, has video  
random access memory (VRAM) (62) to store received content. VRAM is  
configured with write-only function except with regard to video section  
of computing device.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for  
video card.

USE - For securing video card having digital content such as  
digital audio, digital video, digital text, digital data, digital  
multimedia, etc.

ADVANTAGE - Maintains a secure environment or provides a security  
module for protecting data from unauthorized user and/or access, since  
VRAM on the video card is configured with write-only function except  
with regard to the video section.

DESCRIPTION OF DRAWING(S) - The figure shows a block diagram of the  
DRM system and rendering applications of the video card on the  
computing device.

Digital content (12)  
DRM (32)  
Video card (60)  
VRAM (62)  
Monitor (64)

pp; 38 DwgNo 13/13

Title Terms: COMPUTATION; DEVICE; VIDEO; CARD; VIDEO; RANDOM; ACCESS;

MEMORY; CONFIGURATION; WRITING; FUNCTION; VIDEO; SECTION  
Derwent Class: T01; W02; W04  
International Patent Class (Main): G06F-001/00; G06F-012/14; **H04N-007/167**  
International Patent Class (Additional): G06F-003/14; G06F-017/60;  
H04L-009/32  
File Segment: EPI

5/5/9 (Item 2 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

014418815 \*\*Image available\*\*  
WPI Acc No: 2002-239518/200229  
XRPX Acc No: N02-184693

**Distributed digital content protecting terminal has scrambler in content  
player to scramble content before processing the content by tools of  
operating system**

Patent Assignee: MICROSOFT CORP (MICT )  
Inventor: **ENGLAND P** ; MALVAR H  
Number of Countries: 094 Number of Patents: 006  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200161904	A1	20010823	WO 2001US1683	A	20010117	200229 B
AU 200129604	A	20010827	AU 200129604	A	20010117	200229
EP 1258092	A1	20021120	EP 2001953044	A	20010117	200301
			WO 2001US1683	A	20010117	
KR 2002076308	A	20021009	KR 2002710508	A	20020813	200314
CN 1401169	A	20030305	CN 2001804971	A	20010117	200338
JP 2003523694	W	20030805	JP 2001560578	A	20010117	200353
			WO 2001US1683	A	20010117	

Priority Applications (No Type Date): US 2000507478 A 20000217  
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200161904	A1	E	43	H04K-001/02	
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW					
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
AU 200129604	A			H04K-001/02	Based on patent WO 200161904
EP 1258092	A1	E		H04K-001/02	Based on patent WO 200161904
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
KR 2002076308	A			H04N-007/167	
CN 1401169	A			H04K-001/02	
JP 2003523694	W		44	H04L-009/08	Based on patent WO 200161904

Abstract (Basic): WO 200161904 A1

NOVELTY - A scrambler (106) in the content player (52) scrambles  
and adds noise data to the content before processing it by tools of  
operating system. A descrambler (112) in the driver (110) receives  
processed data and recovers the content from scramble content.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the  
following:

- (a) Content scrambler;
- (b) Media player;
- (c) Operating system;
- (d) Content descrambler;
- (e) Scrambling architecture for protecting content distributed by  
content provider;
- (f) Client-server system for protecting content; Method of  
protecting content within computer;
- (g) Computer readable medium having instructions to protect the  
content;

(h) Method of delivering content from server to client over network;

(i) Computer readable medium having instructions to deliver the content

USE - For protecting distributed audio and video data stored in operating system and hardware components of client terminal.

ADVANTAGE - Scrambled data is input to processing system and it is descrambled only at the driver, hence an attacker attempting to copy the bits output from processing system will capture only the noisy data.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the scrambling architecture.

Content player (52)

Scrambler (106)

Driver (110)

Descrambler (112)

pp; 43 DwgNo 4/9

Title Terms: DISTRIBUTE; DIGITAL; CONTENT; PROTECT; TERMINAL; SCRAMBLE;

CONTENT; PLAY; SCRAMBLE; CONTENT; PROCESS; CONTENT; TOOL; OPERATE; SYSTEM

Derwent Class: T01; W02; W03

International Patent Class (Main): H04K-001/02; H04L-009/08; **H04N-007/167**

International Patent Class (Additional): G06F-012/14; H04L-009/18;

**H04N-005/00**

File Segment: EPI.

5/5/10 (Item 3 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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014318341 \*\*Image available\*\*

WPI Acc No: 2002-139043/200218

XRPX Acc No: N02-104788

**Gamma code forming method for fingerprinting digital data for security applications, involves assigning individual finger printing words having spread sequence to individual respective entities**

Patent Assignee: MICROSOFT CORP (MICT )

Inventor: **YACOBI Y**

Number of Countries: 094 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200131910	A1	20010503	WO 2000US29843	A	20001027	200218 B
AU 200112452	A	20010508	AU 200112452	A	20001027	200218
EP 1243126	A1	20020925	EP 2000974015	A	20001027	200271
			WO 2000US29843	A	20001027	
JP 2003513364	W	20030408	WO 2000US29843	A	20001027	200333
			JP 2001533740	A	20001027	

Priority Applications (No Type Date): US 99437713 A 19991028

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200131910 A1 E 51 H04N-001/32

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

AU 200112452 A H04N-001/32 Based on patent WO 200131910

EP 1243126 A1 E H04N-001/32 Based on patent WO 200131910

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SI

JP 2003513364 W 48 G06T-001/00 Based on patent WO 200131910

Abstract (Basic): WO 200131910 A

NOVELTY - Direct sequence spread spectrum (DSSS) technology is utilized and multiple fingerprinting words are defined, each being

unique and having a spread sequence. Individual fingerprinting words are assigned to individual respective entities to identify an entity to which the fingerprinting word is assigned.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) Fingerprinting word detecting method;
- (b) Computer readable program for fingerprinting word detection;
- (c) Object protecting method;
- (d) Gamma code data structure;
- (e) Protected object

USE - For fingerprinting digital data for security applications.

ADVANTAGE - Increases protection range and makes it more difficult for the fingerprinting word to be altered.

DESCRIPTION OF DRAWING(S) - The figure is a flow chart illustrating the steps followed in a detection method.

Dwg. 6/6

Title Terms: GAMMA; CODE; FORMING; METHOD; FINGERPRINT; DIGITAL; DATA; SECURE; APPLY; ASSIGN; INDIVIDUAL; FINGER; PRINT; WORD; SPREAD; SEQUENCE; INDIVIDUAL; RESPECTIVE; ENTITY  
Derwent Class: P85; T01; T03; W02  
International Patent Class (Main): G06T-001/00; H04N-001/32  
International Patent Class (Additional): G09C-005/00; H04N-001/387 ; H04N-005/91 ; H04N-007/08 ; H04N-007/081  
File Segment: EPI; EngPI

5/5/11 (Item 4 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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010474183 \*\*Image available\*\*  
WPI Acc No: 1995-375503/199549  
XRPX Acc No: N95-277010

**Data signal insertion system for video signal e.g. NTSC signal - includes inverse phase shifting circuit which performs second phase shift operation on upper and lower side bands of data signal**

Patent Assignee: MICROSOFT CORP (MICT )  
Inventor: KIM W E; MYHRVOLD N P; YUVAL G A  
Number of Countries: 005 Number of Patents: 006  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 681402	A2	19951108	EP 95106568	A	19950502	199549 B
JP 7322223	A	19951208	JP 95108382	A	19950502	199607
US 5621471	A	19970415	US 94237265	A	19940503	199721
US 5739866	A	19980414	US 94237265	A	19940503	199822
			US 96755970	A	19961125	
EP 681402	B1	20020213	EP 95106568	A	19950502	200212
DE 69525383	E	20020321	DE 625383	A	19950502	200227
			EP 95106568	A	19950502	

Priority Applications (No Type Date): US 94237265 A 19940503; US 96755970 A 19961125

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 681402	A2	E	17	H04N-007/08	
Designated States (Regional): DE FR GB					
JP 7322223	A		11	H04N-007/08	
US 5621471	A		17	H04N-007/081	
US 5739866	A		16	H04N-007/081	Cont of application US 94237265 Cont of patent US 5621471
EP 681402	B1	E		H04N-007/08	
Designated States (Regional): DE FR GB					
DE 69525383	E			H04N-007/08	Based on patent EP 681402

Abstract (Basic): EP 681402 A

The system includes a signal generator which receives the data signal (104) and generates a modulated signal with upper and lower

sidebands. The sidebands have a phase relationship such that the sidebands of the modulated signals are 180 degrees apart w.r.t. each other. An adder adds the modulated signal and a video signal (106) to produce a modified video signal which is transmitted. A signal processor receives the modified video signal and generates a recovered signal having side bands.

The side bands of the recovered signal have a phase relationship such that the side bands and the recovered signal are 0 degrees apart w.r.t. each other. The recovered signal is demodulated to recover the data signal which is inserted into the video signal, transmitted with the video signal and after receipt separated from the video signal.

ADVANTAGE - Introduces additional information signal into video signal without signal interference or bandwidth reduction. Data signal can be inserted into different portions of video signal.

Dwg. 6/7.

Title Terms: DATA; SIGNAL; INSERT; SYSTEM; VIDEO; SIGNAL; NTSC; SIGNAL; INVERSE; PHASE; SHIFT; CIRCUIT; PERFORMANCE; SECOND; PHASE; SHIFT; OPERATE; UPPER; LOWER; SIDE; BAND; DATA; SIGNAL

Derwent Class: W02

International Patent Class (Main): H04N-007/08 ; H04N-007/081

International Patent Class (Additional): H04N-007/081

File Segment: EPI

5/5/12 (Item 5 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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010474182 \*\*Image available\*\*

WPI Acc No: 1995-375502/199549

XRPX Acc No: N95-277009

**Transmission system for data signal with video signal - adds data signal to delayed data signal to generate filtered signal for insertion into unused portion of video signal spectrum so data signal is undetected by normal receivers**

Patent Assignee: MICROSOFT CORP (MICT )

Inventor: KIM W E; MYHRVOLD N P; YUVAL G A

Number of Countries: 006 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 681401	A2	19951108	EP 95106567	A	19950502	199549 B
JP 8009345	A	19960112	JP 95109434	A	19950508	199611
US 5539471	A	19960723	US 94254363	A	19940503	199635
US 5708476	A	19980113	US 94254363	A	19940503	199809
			US 96681083	A	19960722	
KR 319991	B	20020422	KR 9511149	A	19950503	200269

Priority Applications (No Type Date): US 94254363 A 19940503; US 96681083 A 19960722

Cited Patents: No-SR.Pub

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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EP 681401	A2	E	16	H04N-007/08	
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Designated States (Regional): DE FR GB

JP 8009345	A	12	H04N-007/08	
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US 5539471	A	16	H04N-007/08	
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US 5708476	A	15	H04N-007/08	Cont of application US 94254363
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Cont of patent US 5539471

KR 319991	B		H04N-005/222	Previous Publ. patent KR 95035314
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Abstract (Basic): EP 681401 A

The system includes a delay element receiving a data signal (104) and producing a data signal delayed by a predetermined period of time. An adder element adds the data signal and the delayed data signal to produce a filtered signal (108) with characteristics that allow it to be inserted into an unused portion of the frequency video signal spectrum. A modulator (110) modulates a carrier frequency with the

filtered signal to produce a modulated signal.

The system also includes a second adder element (114) which adds the modulated filtered signal and the video signal to produce a modified video signal containing the modulated filtered signal. The first filtered signal is inserted into the unused portion of the video signal spectrum. The system also includes a transmitter, a receiver, a separator circuit and an inverse filter.

ADVANTAGE - Allows additional information signal to be introduced into video signal without signal interference or reduced bandwidth.

Dwg.4/8

Title Terms: TRANSMISSION; SYSTEM; DATA; SIGNAL; VIDEO; SIGNAL; ADD; DATA; SIGNAL; DELAY; DATA; SIGNAL; GENERATE; FILTER; SIGNAL; INSERT; PORTION; VIDEO; SIGNAL; SPECTRUM; SO; DATA; SIGNAL; UNDETECTABLE; NORMAL; RECEIVE

Derwent Class: W02

International Patent Class (Main): H04N-005/222 ; H04N-007/08

International Patent Class (Additional): H04N-007/081

File Segment: EPI

Set	Items	Description
S1	1040	AU=(YACOBI, Y? OR YACOBI Y? OR ENGLAND, P? OR ENGLAND P? OR YUVAL, G? OR YUVAL G?)
S2	1	S1 AND PROTECT?()INFORMATION
S3	0	S1 AND INFORMATION()CONTENT
File	2:INSPEC	1969-2003/Sep W4 (c) 2003 Institution of Electrical Engineers
File	6:NTIS	1964-2003/Oct W1 (c) 2003 NTIS, Intl Cpyrght All Rights Res
File	8:EI Compendex(R)	1970-2003/Sep W4 (c) 2003 Elsevier Eng. Info. Inc.
File	34:SciSearch(R)	Cited Ref Sci 1990-2003/Sep W4 (c) 2003 Inst for Sci Info
File	35:Dissertation Abs Online	1861-2003/Sep (c) 2003 ProQuest Info&Learning
File	65:Inside Conferences	1993-2003/Oct W1 (c) 2003 BLDSC all rts. reserv.
File	92:IHS Intl.Stds.& Specs.	1999/Nov (c) 1999 Information Handling Services
File	94:JICST-EPlus	1985-2003/Sep W4 (c)2003 Japan Science and Tech Corp(JST)
File	95:TEME-Technology & Management	1989-2003/Sep W3 (c) 2003 FIZ TECHNIK
File	99:Wilson Appl. Sci & Tech Abs	1983-2003/Aug (c) 2003 The HW Wilson Co.
File	103:Energy SciTec	1974-2003/Sep B2 (c) 2003 Contains copyrighted material
File	144:Pascal	1973-2003/Sep W4 (c) 2003 INIST/CNRS
File	202:Info. Sci. & Tech. Abs.	1966-2003/Sep 16 (c) 2003 EBSCO Publishing
File	233:Internet & Personal Comp. Abs.	1981-2003/Jul (c) 2003, EBSCO Pub.
File	239:Mathsci	1940-2003/Nov (c) 2003 American Mathematical Society
File	275:Gale Group Computer DB(TM)	1983-2003/Oct 06 (c) 2003 The Gale Group
File	434:SciSearch(R)	Cited Ref Sci 1974-1989/Dec (c) 1998 Inst for Sci Info
File	647:CMP Computer Fulltext	1988-2003/Sep W2 (c) 2003 CMP Media, LLC
File	674:Computer News Fulltext	1989-2003/Sep W4 (c) 2003 IDG Communications
File	696:DIALOG Telecom. Newsletters	1995-2003/Oct 06 (c) 2003 The Dialog Corp.



2/TI/1 (Item 1 from file: 144)  
DIALOG(R)File 144:(c) 2003 INIST/CNRS. All rts. reserv.

The complexity of promise problems with applications to public-key  
cryptography  
?t s2/5/1

2/5/1 (Item 1 from file: 144)  
DIALOG(R)File 144:Pascal  
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06106323 PASCAL No.: 85-0367984

The complexity of promise problems with applications to public-key  
cryptography

EVEN S; SELMAN A L; YACOBI Y

Computer sci. dep., Haifa, Israel

Journal: Information and control, 1984, 61 (2) 159-173

ISSN: 0019-9958 Availability: CNRS-8341

No. of Refs.: 14 ref.

Document Type: P (Serial) ; A (Analytic)

Country of Publication: USA

Language: English

Un probleme de promesses est une formulation d'un probleme de decision  
partiel. Utilisant une notion de reductibilite de Turing entre les  
problemes de promesses, cet article refute une conjecture faite par Even et  
Yacobi, qui impliquerait la non-existence des crypto systemes a cle  
publique avec des problemes de craquage NP-dur

English Descriptors: Information protection; Cryptography; Public key;  
Complexity

French Descriptors: Protection information ; Cryptographie; Cle publique  
; Complexite; Probleme decision; Probleme NP dur

Classification Codes: 001D02B07C

Set	Items	Description
S1	520	ANALOG(3N) (ENCRYPT? OR ENCODE? OR CIPHER? ? OR CYPHER? ? OR CRYPTO? OR (SECURITY OR PUBLIC OR PRIVATE OR MASTER OR PASS) - ( ) (KEY OR KEYS) OR PKI)
S2	2487	(RGB OR RED OR GREEN OR BLUE) (2N) (LINE? OR CONNECTION? OR - CIRCUIT OR PATH? OR WIRE OR WIRES)
S3	2701238	SWAP? OR SWITCH? OR CHANG? OR FLIP() FLOP OR EXCHANG?
S4	20976	(PSEUDORANDOM? OR RANDOM? OR HAPHAZARD? OR UNORDER? OR DIS- ORDER? OR UNORGANI? OR ORDERLESS) (3N) (SEQUENC? OR NUMBER? OR GENERAT?)
S5	0	S1 AND S2
S6	574	S2 AND S3
S7	0	S6 AND S4
S8	0	S2 AND S4
S9	0	S6 AND S1
S10	134	S1 AND S3
S11	2	S10 AND S4
S12	708	S6 OR S10 OR S11
S13	367	S12 AND IC=H04N?
S14	62	S12 AND IC=H04N-007?

File 347:JAPIQ, Oct 1976-2003/Jun(Updated 031006)

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File 350:Derwent WPIX 1963-2003/UD,UM &UP=200364

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14/5/3 (Item 3 from file: 347)  
DIALOG(R) File 347:JAPIO  
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06850721 \*\*Image available\*\*  
IMAGE PROCESSOR

PUB. NO.: 2001-078221 [JP 2001078221 A]  
PUBLISHED: March 23, 2001 (20010323)  
INVENTOR(s): OGASAWARA KOTARO  
SAITO KATSUYUKI  
MOCHIDA AKIHIKO  
TSUNAKAWA MAKOTO  
TASHIRO HIDEKI  
KUSAMURA NOBORU  
APPLICANT(s): OLYMPUS OPTICAL CO LTD  
APPL. NO.: 11-250605 [JP 99250605]  
FILED: September 03, 1999 (19990903)  
INTL CLASS: H04N-009/67; A61B-001/04; G02B-023/24; G06T-001/00;  
H04N-007/18 ; H04N-009/04

#### ABSTRACT

PROBLEM TO BE SOLVED: To realize an image processor capable of easily obtaining desired color reproducibility even when the kind of a light source is **changed**.

SOLUTION: In this image processor, a CPU 5 is provided with a parameter setting circuit 21 that receives an ID signal in response to the kind of a light source from an ID signal generating section 45 of a light source device 4 via a communication means 31. When receiving the ID signal, this parameter setting circuit 21 identifies a type of a lamp 43 of the basis of the ID signal, sets a coefficient for an RGB matrix arithmetic operation as a processing parameter used for the RGB matrix arithmetic operation and outputs the coefficient to an **RGB matrix circuit** 20. Thus, even when another light source device 4 is used, since a proper RGB matrix arithmetic operation can automatically be conducted, the desired color reproducibility can easily be obtained.

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14/5/4 (Item 4 from file: 347)  
DIALOG(R) File 347:JAPIO  
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06817971 \*\*Image available\*\*  
VIDEO MONITOR METHOD AND VIDEO MONITOR DEVICE

PUB. NO.: 2001-045464 [JP 2001045464 A]  
PUBLISHED: February 16, 2001 (20010216)  
INVENTOR(s): SATONUMA KOICHI  
APPLICANT(s): TOSHIBA CORP  
APPL. NO.: 11-212277 [JP 99212277]  
FILED: July 27, 1999 (19990727)  
INTL CLASS: H04N-007/18 ; H04L-012/18; H04L-012/28; H04N-005/232

#### ABSTRACT

PROBLEM TO BE SOLVED: To monitor a video image photographed by one camera at a plurality of positions without deteriorating the video image by the camera by selecting one among a plurality of controllers, connecting the selected controller to a sender of an ATM path whose receiving destination is a photographing device to control the photographing device.

SOLUTION: The video monitor system uses an ATM communication device to distribute a video image photographed by a camera 11 installed in a monitor area to two monitors 12, 13 installed respectively in a sub center on a subordinate network and a center on a host network connected to the subordinate network via this sub center. An **encoder** 15 converts an

**analog** video signal photographed by the camera contained in the subordinate network into a digital signal, which is assembled into an ATM cell by the ATM communication device A1. The camera 11 is connected to an input output port Pla of the ATM communication device A1 and an ATM **switch** B1 outputs a camera control signal.

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14/5/5 (Item 5 from file: 347)  
DIALOG(R)File 347:JAPIO  
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06366967 \*\*Image available\*\*  
TELETEXT RECEIVER

PUB. NO.: 11-308578 [JP 11308578 A]  
PUBLISHED: November 05, 1999 (19991105)  
INVENTOR(s): YAMADA TADASHI  
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD  
APPL. NO.: 10-113157 [JP 98113157]  
FILED: April 23, 1998 (19980423)  
INTL CLASS: H04N-007/025 ; H04N-007/03 ; H04N-007/035 ; G09G-005/10;  
G09G-005/22

#### ABSTRACT

PROBLEM TO BE SOLVED: To make characters easy to watch by improving character contrast or lowering the semi-luminance level of a video only when a super bit in the display mode of a teletext signal is discriminated.

SOLUTION: When a microcomputer 6 identifies a super bit signal 6a from a character signal decoder 3, corresponding to a character contrast control signal 6b, the level of analog primary RGB color signals of at the character signal decoder 3 is controlled so as to be improved for several dozens of dB in the case of super display mode. When the microcomputer 6 discriminates a super bit discriminate signal 6a from the character signal decoder 3, a semi-luminance level control signal is sent to an **RGB switching circuit** 4, and a video signal level **changeover switch** for YM signals constituted in the **RGB switching circuit** is controlled so as to lower the amplitude of the video signal in the case of super display mode in respect to ordinary semi-luminance level. Thus, in the case of fixed full picture display, the doming of GRT is not affected and also contrast **switching** is unnecessitated.

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14/5/6 (Item 6 from file: 347)  
DIALOG(R)File 347:JAPIO  
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06209141 \*\*Image available\*\*  
CONTINUOUS RECORDING SYSTEM, METHOD AND COMPUTER READABLE RECORDING MEDIUM  
RECORDING LONG TIME RECORDING PROGRAM

PUB. NO.: 11-150700 [JP 11150700 A]  
PUBLISHED: June 02, 1999 (19990602)  
INVENTOR(s): KOBAYASHI TAKAHIRO  
APPLICANT(s): FUJITSU LTD  
APPL. NO.: 09-313012 [JP 97313012]  
FILED: November 14, 1997 (19971114)  
INTL CLASS: H04N-005/765; H04N-005/92; H04N-007/24 ; H04N-007/18

#### ABSTRACT

PROBLEM TO BE SOLVED: To make long time video data recording and recorded video retrieving simple and easy by digitizing a video signal that is photographed by a video camera.

SOLUTION: A real time **encoder** 12 converts an **analog** video signal that is inputted from a video camera 10 into digital image data in real time and sends it. A video server 16 has plural storage devices 18, stores inputted digital video data in any of the devices 18 in real time and also sends digital video data that is read from any of the devices 18 to a video reproducing terminal. A long time record processing part 36 continuously records the digital video data that are sent from the encoder 12 by sequentially **switching** plural devices 18 of the server 16 and storing them.

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14/5/7 (Item 7 from file: 347)  
DIALOG(R)File 347:JAPIO  
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06076599 \*\*Image available\*\*  
TELEVISION RECEIVER

PUB. NO.: 11-018110 [JP 11018110 A]  
PUBLISHED: January 22, 1999 (19990122)  
INVENTOR(s): YAMADA NAOICHI  
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD  
APPL. NO.: 09-171416 [JP 97171416]  
FILED: June 27, 1997 (19970627)  
INTL CLASS: H04N-011/20; H04N-005/44; **H04N-007/01** ; H04N-009/00;  
H04N-009/64; H04N-009/66

#### ABSTRACT

PROBLEM TO BE SOLVED: To correct color demodulation singly for the output of an M-N converter by **changing** respective gains in a B-Y gain circuit and an R-Y gain circuit for the output signals of an NTSC system, for which MUSE signals have been converted by the M-N converter.

SOLUTION: An M-N converter 1 converts the high vision signals of a MUSE system into an NTSC system and outputs the Y signals and C signals of M-N. The Y and C signals selected by **switching** the both signals by a **switching** circuit 2 with the control signals of a microcomputer 7 are converted into Y, B-Y and R-Y signals by a color demodulation circuit 3. A B-Y gain control circuit 4 is supplied with an arbitrary gain by the computer 7 and corrects the B-Y signals, only at the time of selecting the signals of the M-N converter 1. An **RGB** matrix **circuit** 6 converts the Y, B-Y and R-Y signals into R, G and B signals. Thus, the color demodulation is corrected singly for the output of the M-N converter 1.

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14/5/8 (Item 8 from file: 347)  
DIALOG(R)File 347:JAPIO  
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05740294 \*\*Image available\*\*  
MOTION DETECTOR, MOTION DETECTION METHOD AND VIDEO CAMERA SYSTEM

PUB. NO.: 10-023394 [JP 10023394 A]  
PUBLISHED: January 23, 1998 (19980123)  
INVENTOR(s): NAGANUMA KAZUTO  
APPLICANT(s): SONY CORP [000218] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 08-186890 [JP 96186890]  
FILED: June 28, 1996 (19960628)  
INTL CLASS: [6] **H04N-007/18** ; H04N-005/225; H04N-009/77; H04N-011/04;  
G06T-007/20; G08B-013/196  
JAPIO CLASS: 44.6 (COMMUNICATION -- Television); 44.9 (COMMUNICATION --

Other); 45.9 (INFORMATION PROCESSING -- Other)  
JAPIO KEYWORD:R098 (ELECTRONIC MATERIALS -- Charge Transfer Elements, CCD &  
BBD); R101 (APPLIED ELECTRONICS -- Video Tape Recorders, VTR)  
; R131 (INFORMATION PROCESSING -- Microcomputers &  
Microprocessors)

#### ABSTRACT

PROBLEM TO BE SOLVED: To obtain a monitor camera system with high reliability by detecting a motion based on a chroma phase angle obtained from a chroma signal component.

SOLUTION: A matrix **circuit** 21 receives **RGB** data from an A/D converter circuit 13 and extracts luminance signal data and chroma signal data consisting of IQ signals. Then the chroma data are distributed to chroma phase angle arithmetic circuits 22, 26. The circuits 22, 26 receive the chroma signal data in the unit of picture elements and conduct arithmetic processing to calculate a phase angle, which is fed to gate circuits 23, 27. The circuits 23, 27 extract a signal within a prescribed frame of upper and lower halves of one image. Integration circuits 24, 28 integrate an information signal of the phase angle with each frame fed from the circuits 23, 27 to obtain a mean chroma phase angle. **Switch** circuits 25, 29 output an output of the circuits 24, 28 to a microcomputer as an evaluation value of a frame unit. The microcomputer generates and stores a reference value based on the evaluation value and compares it with a current evaluation value to detect a motion in the unit of frames.

14/5/9 (Item 9 from file: 347)  
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05609405 \*\*Image available\*\*  
PARALLEL STORAGE DEVICE FOR PLURAL VIDEO IMAGES

PUB. NO.: 09-224205 [JP 9224205 A]  
PUBLISHED: August 26, 1997 (19970826)  
INVENTOR(s): OKADA KAZUO  
TAKAHATA MINORU  
SAKAMOTO HIDEKI  
UEMORI AKIRA  
APPLICANT(s): NIPPON TELEGR & TELEPH CORP <NTT> [000422] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 08-028800 [JP 9628800]  
FILED: February 16, 1996 (19960216)  
INTL CLASS: [6] H04N-005/76; H04N-005/765; **H04N-007/24 ; H04N-007/173**  
JAPIO CLASS: 42.5 (ELECTRONICS -- Equipment); 44.6 (COMMUNICATION -- Television)

#### ABSTRACT

PROBLEM TO BE SOLVED: To provide a parallel storage device for plural video images in which the registration time of a video image is not limited by the storage capacity of a coder and the registration of the video image is finished after a prescribed time even when a long time is required for the input of the video image.

SOLUTION: Three analog video signals 1 are outputted to four optional coders 2 by using a video path **changeover** device 5. While the three coders 2 **encode** each **analog** video signal and store tentatively the video information to each disk device 3, the remaining one coder transfers the video information stored tentatively to a video image storage section 6. A control section 4 selects the coders 2 for coding and temporary storage operation or transfer of the video information stored tentatively to the video image storage section 6. In this case, the control section 4 selects the transfer operation in a prescribed time after the coding operation so that the three analog video signals are continuously coded and transferred to the video image storage section 6, the video path **changeover** device 5 is used to connected the analog video signals 1 to an

idle coder and then the coding and tentative storage are stored. The operations above are repetitively controlled.

14/5/10 (Item 10 from file: 347)  
DIALOG(R)File 347:JAPIO  
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05525126 \*\*Image available\*\*  
IMAGE COMMUNICATION EQUIPMENT

PUB. NO.: 09-139926 [JP 9139926 A]  
PUBLISHED: May 27, 1997 (19970527)  
INVENTOR(s): HAYASHI HIROYUKI  
APPLICANT(s): SHARP CORP [000504] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 07-295257 [JP.95295257]  
FILED: November 14, 1995 (19951114)  
INTL CLASS: [6] H04N-007/14 ; H04M-011/00; H04N-007/10  
JAPIO CLASS: 44.6 (COMMUNICATION -- Television); 44.4 (COMMUNICATION --  
Telephone)  
JAPIO KEYWORD:R131 (INFORMATION PROCESSING -- Microcomputers &  
Microprocessors)

#### ABSTRACT

PROBLEM TO BE SOLVED: To attain effective image communication by using a CODEC section to encode image and audio data or the like and providing an output of the **encoded** data to an **analog** line network via a MODEM when a cable from the analog line network is correctly connected to the equipment.

SOLUTION: When a cable from the analog line network 25 is correctly connected to the equipment, image and audio data or the like from an input device 15 or an equipment 14 for the **analog** line are **encoded** by a CODEC section 8. While coded data of a recorder 7 received in advance or other data are transmitted, the encoded data are converted into signals capable of transmission-reception in the analog line network 25 by means of a MODEM section 21 and the converted data are sent via an analog line control section 20, a line **changeover** section 24. Then the received signals are converted into data processed by a control section at the MODEM section 21 and the converted image and audio data or the like are decoded by the CODEC section 8 and outputted to an output device 12 or a device 14 and the data, as required, are stored in the recorder 7.

14/5/12 (Item 12 from file: 347)  
DIALOG(R)File 347:JAPIO  
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05361876 \*\*Image available\*\*  
MONITORING DEVICE

PUB. NO.: 08-317376 [JP 8317376 A]  
PUBLISHED: November 29, 1996 (19961129)  
INVENTOR(s): YOSHIDA MASAO  
MATSUDA SATOSHI  
NAKAGAWA TAKESHI  
APPLICANT(s): MAITETSUKU.KK [000000] (A Japanese Company or Corporation),  
JP (Japan)  
APPL. NO.: 07-147982 [JP 95147982]  
FILED: May 12, 1995 (19950512)  
INTL CLASS: [6] H04N-007/18 ; G11B-005/09; H04N-005/225  
JAPIO CLASS: 44.6 (COMMUNICATION -- Television); 42.5 (ELECTRONICS --  
Equipment)  
JAPIO KEYWORD:R097 (ELECTRONIC MATERIALS -- Metal Oxide Semiconductors,  
MOS); R098 (ELECTRONIC MATERIALS -- Charge Transfer Elements,  
CCD & BBD); R102 (APPLIED ELECTRONICS -- Video Disk  
Recorders, VDR); R131 (INFORMATION PROCESSING --

Microcomputers & Microprocessors)

ABSTRACT

PURPOSE: To preserve an inputted image as a moving image by digitizing the inputted image, compressing the quantity of information while using an encoding system, and recording that image while increasing the number of frames when there is any **change**.

CONSTITUTION: Signal processing is performed to an image inputted to a CCD camera 1 by a block 2 and a video signal is processed into **analog** and further compression- **encoded** by a block 4. In this case, a compression algorithm 26 is composed of a signal processing processor DSP23 and a microcomputer 22 and since a buffer memory 5 for writing the signal in a CD-ROM writer 6 is compressed, the capacity thereof is less in comparison with the amount of source signals. Then, the encoded and stored image is inversely converted and expanded, so that the original source picture can be reproduced with fidelity. Since this image is a still picture, it can be also recorded as a dynamic image by adjusting the number of frames corresponding to the purpose of a monitored place. When it is desired to check an entering person at a bank or the like, for example, by utilizing the pattern matching or differential matching between preceding and following images, the number of frames is increased when there is any **change**, and the image can be recorded as a dynamic image by motion.

14/5/13 (Item 13 from file: 347)

DIALOG(R)File 347:JAPIO

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05142601 \*\*Image available\*\*

TELEVISION RECEIVER

PUB. NO.: 08-098101 [JP 8098101 A]

PUBLISHED: April 12, 1996 (19960412)

INVENTOR(s): TASHIRO SHIGERU

YASUKI SEIJIROU

SENBON HIROYUKI

TAKASHIMA JUICHI

APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 06-235729 [JP 94235729]

FILED: September 29, 1994 (19940929)

INTL CLASS: [6] H04N-005/445; **H04N-007/025 ; H04N-007/03 ; H04N-007/035**

JAPIO CLASS: 44.6 (COMMUNICATION -- Television)

JAPIO KEYWORD: R011 (LIQUID CRYSTALS); R131 (INFORMATION PROCESSING -- Microcomputers & Microprocessors)

ABSTRACT

PURPOSE: To transmit/receive data between outside units, to screen-display data of the outside unit and to transmit teletext data.

CONSTITUTION: The input/output data processing circuit 91 of a teletext decoder 90 takes in data from the outside unit through a terminal 92 and outputs it to a bus 22. A CPU part 96 analyzes data transferred to the bus 22 and converts it into picture data by using a display processing circuit 24. The picture data is supplied to a video output circuit 12 through an **RGB switch circuit** 9, and a picture based on data from the outside unit is displayed on the display screen of a picture tube 14. On the other hand, the CPU part 96 transmits teletext data held by a data input processing circuit 21 from the terminal 92 through the input/output data processing circuit 91. Thus, the outside unit can use teletext data and information can effectively be used.

14/5/14 (Item 14 from file: 347)

DIALOG(R)File 347:JAPIO

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04655038      \*\*Image available\*\*  
TELEVISION RECEIVER

PUB. NO.:        06-326938 [JP 6326938 A]  
PUBLISHED:      November 25, 1994 (19941125)  
INVENTOR(s):    SATO OSAMU  
APPLICANT(s):   TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP  
                  (Japan)  
APPL. NO.:      05-109120 [JP 93109120]  
FILED:          May 11, 1993 (19930511)  
INTL CLASS:     [5] H04N-005/46; H04N-005/59; **H04N-007/00**  
JAPIO CLASS:    44.6 (COMMUNICATION -- Television)

ABSTRACT

PURPOSE: To obtain picture formation appropriate to each of an NTSC signal and a high-vision signal and to secure the dynamic range of a high-vision signal processing circuit connected to the post stage.

CONSTITUTION: An output from an NTSC signal processing circuit consisting of a video amplifier circuit 1, a band amplifier circuit 2, a color synchronizing circuit 3, a color demodulating circuit 4, and an **RGB conversion circuit** 5 is converted into a high-vision signal format by a signal conversion circuit 7. An output from a high-vision signal processing circuit consisting of a contrast circuit 9, a hue adjusting circuit 10, a picture quality adjusting **circuit** 11, an **RGB conversion circuit** 12, and a brightness adjusting circuit 13 is added to blanking and supplied to a CRT 16 through a driving circuit 15. A signal selecting circuit 8 selects the output of the NTSC signal processing circuit or a high-vision signal and inputs the selected signal to the circuit 9. A detection signal from an anode current detecting circuit 17 is selectively applied to the NTSC signal processing circuit or the high-vision signal processing circuit by a **switching** circuit 18 in accordance with a receiving mode.

14/5/16        (Item 16 from file: 347)  
DIALOG(R) File 347:JAPIO  
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03941880      \*\*Image available\*\*  
VIDEO SIGNAL PROCESSING UNIT

PUB. NO.:        04-306980 [JP 4306980 A]  
PUBLISHED:      October 29, 1992 (19921029)  
INVENTOR(s):    KAWAKAMI TOSHIKATSU  
APPLICANT(s):   MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company  
                  or Corporation), JP (Japan)  
APPL. NO.:      03-071519 [JP 9171519]  
FILED:          April 04, 1991 (19910404)  
INTL CLASS:     [5] H04N-005/262; H04N-005/44; H04N-005/68; **H04N-007/00**  
JAPIO CLASS:    44.6 (COMMUNICATION -- Television); 44.9 (COMMUNICATION --  
                  Other)  
JOURNAL:        Section: E, Section No. 1335, Vol. 17, No. 137, Pg. 70, March  
                  22, 1993 (19930322)

ABSTRACT

PURPOSE: To prevent a title magnified together with a video image from not being affected from magnification of the video image with respect to the processing unit in which a title superimposed component is extracted from a movie software source located at the outside of a video image such as cinemascope size, the position of the title is moved, superimposed on the video image and magnified.

CONSTITUTION: The processing unit is provide with a double speed control circuit 28 used to read a read clock of a field memory 16 at a speed twice a conventional speed so that the amplitude of a title signal is halved in the vertical direction. Moreover, a 2nd scanning conversion circuit

independently of a conventional scanning conversion circuit 21 is provided for a delayed title signal and its read clock is set higher than the scanning conversion circuit 21 to compress the signal optionally in the horizontal direction. Furthermore, an **RGB changeover circuit** is provided to color the title signal.

14/5/17 (Item 17 from file: 347)  
DIALOG(R) File 347:JAPIO  
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03835094 \*\*Image available\*\*  
TELEVISION RECEIVER

PUB. NO.: 04-200194...[JP.4200194 A]...  
PUBLISHED: July 21, 1992 (19920721)  
INVENTOR(s): YAMAMOTO HIROAKI  
APPLICANT(s): SHARP CORP [000504] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 02-334707 [JP 90334707]  
FILED: November 29, 1990 (19901129)  
INTL CLASS: [5] H04N-009/00; H04N-003/27; H04N-005/445; H04N-005/66;  
**H04N-007/08** ; H04N-011/20  
JAPIO CLASS: 44.6 (COMMUNICATION -- Television); 44.9 (COMMUNICATION --  
Other)  
JOURNAL: Section: E, Section No. 1288, Vol. 16, No. 535, Pg. 107,  
November 05, 1992 (19921105)

#### ABSTRACT

PURPOSE: To attain wide aspect video image for teletext by extending and displaying an RGB signal at both ends of a video image on a side panel when a teletext video image is displayed in a wide aspect picture tube so as to connect a center panel and a side panel.

CONSTITUTION: A television signal converted into a base band by a television reception section 2 is fed to a video demodulation circuit 4 and a teletext decoder 10 and an audio signal converted into the base band similarly is fed to an audio demodulation circuit 3. On a horizontal time conversion **circuit 11**, an **RGB** signal is subject to time compression so that a teletext signal pattern is displayed on a wide aspect picture tube without aspect distortion and fed to an adder 14. The adder 14 adds a teletext decode signal subjected to time compression and a side panel signal and the RGB signal of the teletext subjected to wide aspect is fed to a video audio **changeover** circuit 5.

14/5/19 (Item 19 from file: 347)  
DIALOG(R) File 347:JAPIO  
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03326688 \*\*Image available\*\*  
STANDARD/HIGH DEFINITION TELEVISION RECEIVER

PUB. NO.: 02-302188 [JP 2302188 A]  
PUBLISHED: December 14, 1990 (19901214)  
INVENTOR(s): HIRAHATA SHIGERU  
KATSUMATA KENJI  
NAKAGAWA HIMIO  
APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 01-121506 [JP 89121506]  
FILED: May 17, 1989 (19890517)  
INTL CLASS: [5] **H04N-007/01**  
JAPIO CLASS: 44.6 (COMMUNICATION -- Television)  
JOURNAL: Section: E, Section No. 1039, Vol. 15, No. 86, Pg. 164,  
February 28, 1991 (19910228)

#### ABSTRACT

PURPOSE: To simplify the scale of a processing circuit by using a scanning system conversion circuit so as to convert a video signal with 1125 lines of interlace scanning and 16:9 aspect ratio into a video signal with 525 lines of interlace scanning and 16:9 aspect ratio for moving picture processing only.

CONSTITUTION: When a standard/high definition signal **changeover** circuit 117 selects the position of high definition signal (position b), a MUSE system base band signal is inputted to a scanning system conversion circuit 118. The circuit 118 converts an arrival signal with 1125 vertical interlace scanning lines into an RGB color signal with 525 interlace scanning lines and a synchronizing signal in matching therewith and they are supplied to the **changeover** circuit 117. In this case, the naturality of the picture is not lost even when the horizontal resolution is decreased in matching with the decrease in the vertical resolution resulting from halved vertical scanning lines. Thus, the decode processing of the MUSE system signal is limited to the moving picture processing only to simplify the processing together with the scanning line conversion.

14/5/20 (Item 20 from file: 347)

DIALOG(R) File 347:JAPIO

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03292589 \*\*Image available\*\*  
RECORDING AND REPRODUCING DEVICE

PUB. NO.: 02-268089 [JP 2268089 A]  
PUBLISHED: November 01, 1990 (19901101)  
INVENTOR(s): MIMURA TOSHIHIKO  
APPLICANT(s): CANON INC [000100] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 01-089919 [JP 8989919]  
FILED: April 10, 1989 (19890410)  
INTL CLASS: [5] H04N-005/92; H04N-007/13  
JAPIO CLASS: 44.6 (COMMUNICATION -- Television)  
JOURNAL: Section: E, Section No. 1024, Vol. 15, No. 22, Pg. 93,  
January 18, 1991 (19910118)

#### ABSTRACT

PURPOSE: To decrease the memory capacity and to prevent large circuit scale by providing a circuit using even at reproduction a 2-dimension filter for generating a luminance signal at storage and applying subsampling to the sampling at reproduction for each field.

CONSTITUTION: An output of an image pickup device 10 is subject to A/D conversion 18 from a contact (b) of a **switch** 16 and stored in a frame memory 20. The output of the memory 20 is a luminance signal by a vertical LPF 24 and a horizontal LPF 28 and becomes color difference signals R-Y, B-Y by a horizontal LPF 30, a RGB **switch** 32 and an RGB matrix **circuit** 34. Then the luminance signal and the color difference signals R-Y, B-Y are recorded on a recording body via a recording and reproducing device 50. Then at reproduction, loopback of A/D converter is eliminated by the LPF 54, 56, 58 and the luminance signal and color difference signals are subject to inter-field offset subsampling via a **switch** 60. The output is stored in the memory 20 via a contact (a) of the **switch** 16 and the luminance signal is converted into analog signal by LPFs 24, 28, a D/A converter 38 and LPF 26 and D/A converters 40, 42 respectively.

14/5/21 (Item 21 from file: 347)

DIALOG(R) File 347:JAPIO

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03222784 \*\*Image available\*\*  
TELEVISION RECEIVER

PUB. NO.: 02-198284 [JP 2198284 A]  
PUBLISHED: August 06, 1990 (19900806)  
INVENTOR(s): SHIMONO YOSHIO  
APPLICANT(s): FUJITSU GENERAL LTD [000661] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 01-016257 [JP 8916257]  
FILED: January 27, 1989 (19890127)  
INTL CLASS: [5] H04N-005/445; **H04N-007/08**  
JAPIO CLASS: 44.6 (COMMUNICATION -- Television)  
JOURNAL: Section: E, Section No. 993, Vol. 14, No. 483, Pg. 25, October 22, 1990 (19901022)

ABSTRACT

PURPOSE: To solve the waiting time when parentage is inverted by removing the fly-back period of a vertical synchronous signal from teletext signal fetching timing.

CONSTITUTION: When **switches** 5, 9, and 9' are at a continuous line side, since a character decoder 6 decodes teletext from a tuner TU 2 and inputs the decoded teletext through a subordinate screen circuit 8 to an **RGB switching circuit** 4, on a CRT 11, while a television broadcasting screen by a TU 1 is displayed as a master screen, a teletext screen by the TU 2 is displayed as a slave screen. When the master screen and the slave screen are inverted, after the TU 1 becomes stable, the **switches** 5, 9, and 9' are **switched** to a broken line side by a control circuit 10 in the timing time of the vertical synchronous signal inputted from a synchronization separating circuit 7 to the circuit 10 except the fly-back period of the vertical synchronous signal. In this manner, the **switching** from the TU 2 to the TU 1 is executed while continuity is held. Thus, the waiting time when the parentage is inverted can be solved.

14/5/22 (Item 22 from file: 347)

DIALOG(R) File 347:JAPIO

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02845976 \*\*Image available\*\*  
TELETEXT RECEIVER

PUB. NO.: 01-143576 [JP 1143576 A]  
PUBLISHED: June 06, 1989 (19890606)  
INVENTOR(s): HAYASHI SHUNEI  
KOTAKA YOSHIKAZU  
APPLICANT(s): SONY CORP [000218] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 62-301913 [JP 87301913]  
FILED: November 30, 1987 (19871130)  
INTL CLASS: [4] **H04N-007/08**  
JAPIO CLASS: 44.6 (COMMUNICATION -- Television)  
JOURNAL: Section: E, Section No. 816, Vol. 13, No. 401, Pg. 89, September 06, 1989 (19890906)

ABSTRACT

PURPOSE: To discriminate from which station the teletext broadcast comes by devising the device such that it is confirmed by the depression of a screen display key as to which channel of teletext is being received when the mode is **switched** from the external video signal reception mode into the teletext signal reception mode.

CONSTITUTION: With a teletext key depressed, a microcomputer 13 controls a video control signal 14v and a voice control signal 14s so as to throw **switches** SW(sub 1), SW(sub 2) to the position of the TV terminal via a teletext processor 14. Simultaneously, an **RGB changeover circuit** 10 is thrown to the position of the processor 14 to establish the teletext reception mode. With a screen display key of a remote control operating means 17 depressed in this state, the computer 13 controls a teletext signal generating circuit 16 to extract a channel number of a teletext

broadcast station received at present and gives the number to the circuit 10 via the circuit 16. Thus, the channel number is displayed on the screen of the display means 11.

14/5/23 (Item 23 from file: 347)  
DIALOG(R)File 347:JAPIO  
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02688788 \*\*Image available\*\*  
TELEVISION RECEIVER FOR MULTIPLEX BROADCASTING

PUB. NO.: 63-305688 [JP 63305688 A]  
PUBLISHED: December 13, 1988 (19881213)  
INVENTOR(s): ONOE SHIRO  
APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 62-141925 [JP 87141925]  
FILED: June 05, 1987 (19870605)  
INTL CLASS: [4] H04N-007/08  
JAPIO CLASS: 44.6 (COMMUNICATION -- Television)  
JOURNAL: Section: E, Section No. 740, Vol. 13, No. 144, Pg. 49, April  
10, 1989 (19890410)

#### ABSTRACT

PURPOSE: To simplify an operation for the reception of teletex program by providing a reservation memory that stores the reception channel number for the teletex program together with the program number of the teletex program to be received, and executing the control of the reception channel also at the time of receiving the program.

CONSTITUTION: A reserve/program designation data processing circuit 17 provides correspondence to the channel number data of a reserved program and its program number data, and supplies a reserve data in which both data are made to a set to a program reserving memory 21. When the processing circuit 17 processes reserved data (b), channel number data (a) is supplied to a tuner/IF processing/channel selection circuit 11, and the circuit 11 controls a tuner based on the (a). In the meantime, program number data (c) is supplied to a character signal processing circuit 16, and the circuit 16 retrieves the program while referring to the (c) to supply a character RGB signals 16b after display processing to an RGB switching circuit 15, and simultaneously, supplies an input mode switching signal 16a to an input switching circuit 13. To the circuit 15, TVRGB signals also are inputted from a video processing circuit 14, so that the circuit 15 switches selectively respective RGB signals under prescribed control signals and outputs them.

14/5/24 (Item 24 from file: 347)  
DIALOG(R)File 347:JAPIO  
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02572186 \*\*Image available\*\*  
TELEVISION RECEIVER

PUB. NO.: 63-189086 [JP 63189086 A]  
PUBLISHED: August 04, 1988 (19880804)  
INVENTOR(s): SUNADA KOICHI  
APPLICANT(s): NEC HOME ELECTRONICS LTD [000193] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 62-021475 [JP 8721475]  
FILED: January 31, 1987 (19870131)  
INTL CLASS: [4] H04N-007/08 ; H04N-003/32; H04N-005/208  
JAPIO CLASS: 44.6 (COMMUNICATION -- Television)  
JOURNAL: Section: E, Section No. 691, Vol. 12, No. 469, Pg. 68,  
December 08, 1988 (19881208)

#### ABSTRACT

PURPOSE: To prevent the deterioration of picture quality by the excessive emphasis of the contour by discriminating the reception display of teletext among signals outputted from a character decoder part which is incorporated to receive the teletext and stopping the operation in a contour correction part.

CONSTITUTION: A back **switch** signal is generated by the character signal decoder part incorporated in the receiving adaptor of the teletext according to an area where the character is super-displayed and supplied to an **RGB** signal **switch** **circuit** 6. The super-display character is facilitated to be seen by reducing back brightness. A television character screen **switch** signal Y and a back brightness **switch** signal Y are inputted by an OR gate 10 composing the contour correction interruption control part 9 and a correction interruption signal is outputted while one of those signals is generated. Thus a **switch** circuit 13 provided with the contour correction part 11 is operated to earth all velocity modulation signals from a velocity modulation signal generation circuit 12 and the contour correction part 11 is stopped operating.

14/5/25 (Item 25 from file: 347)

DIALOG(R)File 347:JAPIO

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02162080 \*\*Image available\*\*

PLURAL CHANNEL ANIMATION TRANSMISSION SYSTEM

PUB. NO.: 62-078980 [JP 62078980 A]

PUBLISHED: April 11, 1987 (19870411)

INVENTOR(s): HARAGUCHI SATOSHI

APPLICANT(s): MITSUBISHI ELECTRIC CORP [000601] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 60-219340 [JP 85219340]

FILED: October 02, 1985 (19851002)

INTL CLASS: [4] H04N-007/00 ; H04N-009/68

JAPIO CLASS: 44.6 (COMMUNICATION -- Television)

JOURNAL: Section: E, Section No. 539, Vol. 11, No. 280, Pg. 78, September 10, 1987 (19870910)

#### ABSTRACT

PURPOSE: To easily increase an animation channel without increasing transmission cables and dispose plural sets of large size picture display devices for displaying different animations by dividing or synthesizing the plural animation information into the single animation information and transmitting to a reception display means.

CONSTITUTION: A video signal enters a **switcher** 22 having four outputs and a signal outputted by its selecting operation is inputted to a picture memory 15. The picture memory 15 converts four video inputs to digital signals of R, G, B, divides one picture into four to which the respective digital signals are assigned; and the digital signals are stored in picture memories 16-18, the contents thereof are fed to plural reception display devices 21 through an optical cable 6. In the reception display devices 21, a signal is fetched, stored in picture memories 8-10 for respective signals of red, green and **blue**, a reading **circuit** 19 reads a prescribed part of the memories 8-10 according to a signal of a memory reading point setting part 20, feeds to a large picture display device 12 and lights a relevant display element 13 to a prescribed brightness.

14/5/26 (Item 26 from file: 347)

DIALOG(R)File 347:JAPIO

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02006475 \*\*Image available\*\*

TELEVISION SIGNAL PROCESSOR

PUB. NO.: 61-220575 [JP 61220575 A]  
PUBLISHED: September 30, 1986 (19860930)  
INVENTOR(s): MITSUOKA MASAHAIDE  
YOSHIDA YUTAKA  
APPLICANT(s): SONY CORP [000218] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 60-063098 [JP 8563098]  
FILED: March 26, 1985 (19850326)  
INTL CLASS: [4] H04N-007/01  
JAPIO CLASS: 44.6 (COMMUNICATION -- Television)  
JOURNAL: Section: E, Section No. 483, Vol. 11, No. 61, Pg. 57,  
February 25, 1987 (19870225)

#### ABSTRACT

PURPOSE: To realize a natural animation with a simple constitution by transmitting an output television signal in accordance with the action of an animation on the basis of an average signal available from carrying out weighted-average of television signals of a scan line and its vertical lines.

CONSTITUTION: In terms of a move compensating circuit 14R, primary red color signals FR and LR in odd and even fields from a line memory 13R are given to a switching circuit 20, which has switch circuits 20A and 20B interlocking with the circuit 20. Signals in respective field are switched and outputted alternately. The 1st and 2nd averaging circuits 21 and 25 obtain weighted-averages between the scan line and its vertical lines. The average signal S(sub 4) is given to a switching circuit 28 and a deciding circuit 30. The former is switched and controlled by a control signal S(sub 5) given from the deciding circuit 30, and transmits the average signal S(sub 4) or an output signal S(sub 1) to an enhancer 15R.

14/5/28 (Item 28 from file: 347)  
DIALOG(R) File 347:JAPIO  
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01555289 \*\*Image available\*\*  
METHOD FOR TRANSMITTING PICTURE TO BE CODED

PUB. NO.: 60-033789 [JP 60033789 A]  
PUBLISHED: February 21, 1985 (19850221)  
INVENTOR(s): ASABE TSUTOMU  
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company  
or Corporation), JP (Japan)  
APPL. NO.: 58-143006 [JP 83143006]  
FILED: August 03, 1983 (19830803)  
INTL CLASS: [4] H04N-007/133  
JAPIO CLASS: 44.6 (COMMUNICATION -- Television)  
JAPIO KEYWORD: R131 (INFORMATION PROCESSING -- Microcomputers &  
Microprocessors)  
JOURNAL: Section: E, Section No. 325, Vol. 09, No. 154, Pg. 92, June  
28, 1985 (19850628)

#### ABSTRACT

PURPOSE: To change a quantizing bit number and a forecast formula or the like corresponding to kinds of picture signals RGB by transmitting information such as line number and dot number of a picture to be coded as a frame header.

CONSTITUTION: Forecast coding is attained by adding a frame header and a line header in addition to coded data as a code series coding still picture information. Each frame is constituted by RGB chrominance component in case of the still picture information. The frame identification information represents the frame identification and the frame kinds such as RGB. The line information represents the information such as line number or the like constituting a frame and the dot information represents the

information of a dot number constituting a line. The coded information represents information such as quantized bit number (n) or the like of the forecast coding system. The transmission efficiency is improved by **changing** the quantized bit number (n) as to each RGB component depending on the information amount of the RGB component.

14/5/29 (Item 29 from file: 347)  
DIALOG(R) File 347:JAPIO  
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01306186 \*\*Image available\*\*  
CHARACTER SIGNAL CONTROLLER

PUB. NO.: 59-017786 [JP 59017786 A]  
PUBLISHED: January 30, 1984 (19840130)  
INVENTOR(s): KITAHAMA ISAMU  
APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 57-126744 [JP 82126744]  
FILED: July 22, 1982 (19820722)  
INTL CLASS: [3] **H04N-007/08** ; H04N-009/02  
JAPIO CLASS: 44.6 (COMMUNICATION -- Television)  
JOURNAL: Section: E, Section No. 243, Vol. 08, No. 99, Pg. 146, May  
10, 1984 (19840510)

#### ABSTRACT

PURPOSE: To set the display mode of a character signal in line units, by constituting a device so that a control signal for character signal mode **switching** is outputted from plural output lines of a serial-parallel converting circuit.

CONSTITUTION: Division pulses outputted from a division pulse generating circuit 12 are inputted in series to a serial-parallel converting circuit 14 through a set **switcher** 13. This converting circuit 14 has plural output line (e), (f), (g)-(h), and each output line outputs '1' during a period corresponding to an interval of division pulses. Outputs signals from these output lines are sent to an external character signal processing device through output terminals 2. This character signal processing device processes signals in an optional mode in line units, for example, to display red characters by the control signal of the output line (e), display **blue** characters by the control signal to the output line (f), perform the shadow processing of characters by the control signal of the output line (g), etc.

14/5/30 (Item 30 from file: 347)  
DIALOG(R) File 347:JAPIO  
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01276163 \*\*Image available\*\*  
CIRCUIT FOR DIGITIZING VIDEO SIGNAL

PUB. NO.: 58-213563 [JP 58213563 A]  
PUBLISHED: December 12, 1983 (19831212)  
INVENTOR(s): NISHINO ISAO  
APPLICANT(s): MITSUBISHI ELECTRIC CORP [000601] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 57-096519 [JP 8296519]  
FILED: June 04, 1982 (19820604)  
INTL CLASS: [3] H04N-001/40; **H04N-007/13**  
JAPIO CLASS: 44.7 (COMMUNICATION -- Facsimile); 44.6 (COMMUNICATION -- Television)  
JOURNAL: Section: E, Section No. 233, Vol. 08, No. 63, Pg. 148, March  
24, 1984 (19840324)

#### ABSTRACT

PURPOSE: To output a digital signal which represents the variation of



brightness, by discriminating an analog video signal at a fixed reference level after overlapping a signal of a fixed cycle having a steeply inclined part thereon to **encode** the **analog** signal.

CONSTITUTION: When video signal, whose brightness is continuously **changed**, is given to an input terminal 1, triangular wave signal having a fixed cycle is outputted from a triangular wave signal generating circuit 6. Therefore, signal which is formed by overlapping the triangular wave signal upon the video signal is given to the (+) side input terminal of a comparator 2. The comparator 2 performs the discrimination of the level of a reference voltage V0 and a printer 5 performs the printing in accordance with the output of the comparator 2. In the printed content, a condition in which the width of the printed part (hatched part) gradually becomes narrower and the video signal continuously becomes brighter, is shown. In this way, even when analog video signal is simply converted into digital signal of two gradations by level discrimination, the video signal can be printed artificially as if it is of multi-gradation.

14/5/31 (Item 31 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2003 JPO & JAPIO. All rts. reserv.

01180343 \*\*Image available\*\*  
ENCODER

PUB. NO.: 58-117743 [JP 58117743 A]  
PUBLISHED: July 13, 1983 (19830713)  
INVENTOR(s): SUZUKI NORIO  
APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 57-000730 [JP 82730]  
FILED: January 06, 1982 (19820106)  
INTL CLASS: [3] H04B-012/02; H04B-012/04; H04N-001/41; **H04N-007/12**  
JAPIO CLASS: 44.2 (COMMUNICATION -- Transmission Systems); 44.6  
(COMMUNICATION -- Television); 44.7 (COMMUNICATION --  
Facsimile)  
JOURNAL: Section: E, Section No. 202, Vol. 07, No. 226, Pg. 164,  
October 07, 1983 (19831007)

#### ABSTRACT

PURPOSE: To simplify the hardware without deteriorating the efficiency of encoding, by performing the estimate-encoding for the high order bits only and quantizing the low order bits adaptively, in place of the estimates encoding of all the bits.

CONSTITUTION: An **analog** signal (picture signal) **encoded** in 8-bit is applied to a distributor 5 of an encoder 31, where the high order 6-bit is applied to an estimate-encoder 33 and the low order 2-bit is to an quantizer 7. The encoder 33 **changes** over the characteristics (encoding/quantization) in response to a control mode signal from a control circuit 35 for the estimate encoding and outputs an estimated error signal to a code converter 34. The quantizer 7 quantizes signals according to the quantizing characteristic selected with the mode signal and outputs a quantized output signal to a code converter 34. The converter 34 converts the supplied signal according to the mode signal and multiplexes the signal with the mode signal. The control circuit 35 monitors the content of a smoothing buffer memory in matching with the transmission speed of a transmission line and outputs the mode signal so as not to produce overflow/underflow.

14/5/34 (Item 3 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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013812740 \*\*Image available\*\*

WPI Acc No: 2001-296952/200131  
XRPX Acc No: N01-212943

**Analog video signal processing system has synchronizing signal generator which adds synchronizing signals enabling synchronized reception of individual video signals from scrambled video signal component**

Patent Assignee: TOSHIBA KK (TOKE )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2001069136	A	20010316	JP 99240122	A	19990826	200131 B

Priority Applications (No Type Date): JP 99240122 A 19990826

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2001069136	A		27	H04L-009/20	

Abstract (Basic): JP 2001069136 A

NOVELTY - A signal **switching** section replaces and scrambles arbitrary video signal components among luminance signal component and color difference signal components. Synchronizing signal generator adds synchronizing signal required to perform synchronized reception of either of the video signals from scrambled video signal component.

USE - For analog video copy protection.

ADVANTAGE - Prevents inaccurate utilization and incorrect copy of video information by transmitting **encrypted analog** video information.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of **analog** signal **encryption** section of video signal processing system. (The drawing includes non-English language text).

pp; 27 DwgNo 5/32

Title Terms: ANALOGUE; VIDEO; SIGNAL; PROCESS; SYSTEM; SIGNAL; GENERATOR; ADD; SIGNAL; ENABLE; RECEPTION; INDIVIDUAL; VIDEO; SIGNAL; SCRAMBLE; VIDEO; SIGNAL; COMPONENT

Derwent Class: W01; W02; W04

International Patent Class (Main): H04L-009/20

International Patent Class (Additional): H04K-001/04; H04L-009/32;

H04N-005/91; H04N-005/92; **H04N-007/169** ; H04N-009/804; H04N-009/808

File Segment: EPI

14/5/35 (Item 4 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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013701391 \*\*Image available\*\*

WPI Acc No: 2001-185615/200119

XRPX Acc No: N01-132630

**Analog copy protection system for video signal, has key information exchange unit to communicate key information between terminals, for decoding encrypted video signal**

Patent Assignee: TOSHIBA KK (TOKE )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2000358227	A	20001226	JP 99171273	A	19990617	200119 B

Priority Applications (No Type Date): JP 99171273 A 19990617

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2000358227	A		29	H04N-007/16	

Abstract (Basic): JP 2000358227 A

NOVELTY - An **encrypted analog** video signal is communicated between the terminals at a transmission side apparatus (10) and receiving side apparatus (30). A key information for decoding the encrypted video signal is **exchanged** between the terminals, by a key information **exchange** unit.

USE - For video signal of formats other than NTSC or PAL system.

ADVANTAGE - Provides copy protection to signals with format other than NTSC.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of analog copy protection system.

Transmission and receiving side apparatuses (10,30)

pp; 29 DwgNo 1/37

Title Terms: ANALOGUE; COPY; PROTECT; SYSTEM; VIDEO; SIGNAL; KEY;

INFORMATION; **EXCHANGE**; UNIT; COMMUNICATE; KEY; INFORMATION; TERMINAL;

DECODE; ENCRYPTION; VIDEO; SIGNAL

Derwent Class: W01; W02

International Patent Class (Main): **H04N-007/16**

International Patent Class (Additional): H04L-009/10; **H04N-007/08** ;

**H04N-007/081**

File Segment: EPI

**14/5/37 (Item 6 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

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012381821 \*\*Image available\*\*

WPI Acc No: 1999-187928/199916

XRPX Acc No: N99-138165

**MPEG based motion image video stream transmission system**

Patent Assignee: KOREA ELECTRONICS & TELECOM RES INST (KOEL-N); KOREA

TELECOM CORP (KOTE-N); KOREA ELECTRONICS & TELECOM RES (KOEL-N); KOREA

TELECOM (KOTE-N); ELECTRONICS & TELECOM RES INST (ELTE-N)

Inventor: CHUNG C; KANG S; KIM H; CHUNG C H; KANG S S; KIM H J; ZHUNG C H

Number of Countries: 002 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
KR 97057884	A	19970731	KR 9554001	A	19951222	199916 B
US 5875007	A	19990223	US 96758152	A	19961125	199916
KR 183139	B1	19990501	KR 9554001	A	19951222	200052

Priority Applications (No Type Date): KR 9554001 A 19951222

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
KR 97057884	A			H04N-007/24	
US 5875007	A	11		H04N-007/22	
KR 183139	B1			H04N-007/24	

Abstract (Basic): US 5875007 A

NOVELTY - A second stage multiplexer (15) is used to construct a DS3 frame by inserting an overhead in a signal input from first stage multiplexer (13) and multiplexing it. A head end having an optical transmitting unit (18) converts a DS3 signal input from second multiplexer into an optical signal and to output the converted signal.

DETAILED DESCRIPTION - The system includes an MPEGII encoder (11) which **encodes** an **analog** video signal on a motion image video signal. A framing unit (12) frames and outputs an MPEGII to video stream by controlling a read clock of pure data, whenever data of MPEGII video is variable. Then, the transmission velocity is registered into the video stream input into MPEGII encoder. An I-stage multiplexer (13) is used for inserting and multiplexing and then performing an output of an order wire signal for order wire with a remote terminal of a **switching** center and a signal for a frame alignment word. An optical transmitter (18) converts the optical signal transmitted from head end into electrical signal.

A pair of demultiplexers (19,21) are used to demultiplex DS3 signal input from the optical transmitter and extracting the overhead. A remote terminal having a video **switching** unit is used for **switching** and to output a video signal output from the demultiplexer (21). A subscriber terminal apparatus converts the MPEGII video signal into an analog signal after reframing a video signal output from the remote terminal. Then the converted signal is output.

USE - None given.

ADVANTAGE - Facilitates high capacity video transmission from head end to remote terminal to subscriber.

DESCRIPTION OF DRAWING(S) - The drawings shows the block diagrams of the transmission system and head end respectively.

MPEGII encoder 11

Framing unit 12

Multiplexer 13,15

Optical transmitters 18

Demultiplexers 19,21

Dwg.1,2/6

Title Terms: BASED; MOTION; IMAGE; VIDEO; STREAM; TRANSMISSION; SYSTEM

Derwent Class: W02

International Patent Class (Main): H04N-007/22 ; H04N-007/24

International Patent Class (Additional): H04N-007/52

File Segment: EPI

14/5/38 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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012078271 \*\*Image available\*\*

WPI Acc No: 1998-495182/199842

Related WPI Acc No: 2001-594896; 2002-380631

XRFX Acc No: N98-386801

Analog encoded information transmission method for audio and video transmitter and receiver system - involves comparing chrominance and luminance of pels of displaced objects of former frame with pels in present frame to obtain matching condition within preset variance

Patent Assignee: HARRIS CORP (HARO )

Inventor: KING L

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5802211	A	19980901	US 94366763	A	19941230	199842 B
			US 96699411	A	19960819	

Priority Applications (No Type Date): US 94366763 A 19941230; US 96699411 A 19960819

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5802211	A		20	G06K-009/36	Cont of application US 94366763

Abstract (Basic): US 5802211 A

The method involves storing information corresponding to multiple frames in a memory at the transmitter. Two partial images from one frame in memory at the transmitter and receiver are stored as objects prior to present frame transmission. Then, each object is divided into rectangular tiles. Motion vector describing position and orientation changes between a present frame and a former frame are defined to each tile in the object. The motion vectors are applied to the respective tiles in the form of frame to displace the tiles, according to position and orientation changes. The luminance and chrominance of the displaced tiles are compared with image regions in the present frame having the same coordinate to obtain a matching condition lying within a preset variance. The process is repeated until the motion vector which produces the best match for each tile within the preset variance, is determined.

The object transformations for each object are generated, related to the collective motion vectors which produce the best match and depth placement changes of the tiles. The object transformations are applied to the pels in each object in the former frame to displace the object accordingly. The chrominance and luminance of the pels of the displaced object are compared with the pels in the present frame having the same coordinates to obtain a matching condition within a preset variance. The matched tiles define the object and the corresponding

object transformation describes the **change** between the former frame and the present frame in the relationship of the object to the frames. The pels that are not matched within the preset variance or designated as new objects. The generation of object transformation and the succeeding steps are carried out for the new object. The defined object and the corresponding object transformation are stored in memory at the transmitter. The object transformations and the corresponding object identifications of the defined objects are transmitted.

USE - For TV images.

ADVANTAGE - Enables transmission of visual data without flicker and with reduced bandwidth requirements. Reduces redundant information in successive frames

Dwg.3/14

Title Terms: ANALOGUE; ENCODE; INFORMATION; TRANSMISSION; METHOD; AUDIO; VIDEO; TRANSMIT; RECEIVE; SYSTEM; COMPARE; CHROMINANCE; LUMINOUS; DISPLACE; OBJECT; FORMER; FRAME; PRESENT; FRAME; OBTAIN; MATCH; CONDITION; PRESET; VARIANCE

Derwent Class: T01; W02; W04

International Patent Class (Main): G06K-009/36

International Patent Class (Additional): H04N-007/12

File Segment: EPI

14/5/39 (Item 8 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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011895960 \*\*Image available\*\*

WPI Acc No: 1998-312870/199827

XRPX Acc No: N98-245219

**Adaptor circuit for converting RGB to flat panel display signals - has circuit identifying analog format and digitising signal accordingly into buffer area for outputting to flat panel display**

Patent Assignee: SAGE INC (SAGE-N)

Inventor: REDDY C S; RAJASHEKARAN R; REDDY R

Number of Countries: 079 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9823094	A2	19980528	WO 97US20667	A	19971117	199827 B
AU 9854358	A	19980610	AU 9854358	A	19971117	199843
US 5953074	A	19990914	US 9631133	A	19961118	199944
			US 97948787	A	19971010	
US 6078361	A	20000620	US 9631133	A	19961118	200035
			US 97948827	A	19971010	
US 6195079	B1	20010227	US 9631133	A	19961118	200114
			US 97948684	A	19971010	

Priority Applications (No Type Date): US 97948827 A 19971010; US 9631133 P 19961118; US 97948684 A 19971010; US 97948787 A 19971010

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 9823094 A2 E 40 H04N-009/00

Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW

Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

AU 9854358 A Based on patent WO 9823094

US 5953074 A H04N-005/46 Provisional application US 9631133

US 6078361 A H04N-005/46 Provisional application US 9631133

US 6195079 B1 G09G-005/34 Provisional application US 9631133

Abstract (Basic): WO 9823094 A

The adaptor is used to link a computer to a flat panel display. The computer outputs a conventional RGB signal in one of a number of known formats. This signal is input (3) to the adaptor. The adaptor detects

the horizontal sync signals and uses this to control a clock (112). The adaptor also analyses and recognised the analog format in use and stores the digitised data in a dual port video frame memory in a compressed format.

The data is extracted at a rate depending upon the format and decompressed. It is converted into a format suited to the flat panel display (108). A user controlled menu system (106) is provided to alter brightness and contrast.

ADVANTAGE - Allows users to readily **switch** their computer monitors to a flat panel display without altering the internal cards.

Dwg.1/9

Title Terms: ADAPT; CIRCUIT; CONVERT; RGB; FLAT; PANEL; DISPLAY; SIGNAL; CIRCUIT; IDENTIFY; ANALOGUE; FORMAT; DIGITAL; SIGNAL; ACCORD; BUFFER; AREA; OUTPUT; FLAT; PANEL; DISPLAY

Derwent Class: P85; T04; U14; U21

International Patent Class (Main): G09G-005/34; H04N-005/46; H04N-009/00

International Patent Class (Additional): G09G-003/20; G09G-003/36;

G09G-005/00; G09G-005/08; H04N-005/50; **H04N-007/00 ; H04N-007/01 ;**

H04N-009/74

File Segment: EPI; EngPI

**14/5/40 (Item 9 from file: 350)**

DIALOG(R) File 350:Derwent WPIX

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011547902 \*\*Image available\*\*

WPI Acc No: 1997-524383/199748

..XRPX Acc No: N97-437042

**Transmitter connected between I/O device and computer network and TV conference system - has compression buffer which compresses encoded data from audio and video encoder and outputs to network**

Patent Assignee: CANON KK (CANO )

Inventor: KAWAI T; KUMAGAI A; SATO H

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 9252462	A	19970922	JP 96159403	A	19960620	199748 B
US 6249324	B1	20010619	US 96777409	A	19961230	200137

Priority Applications (No Type Date): JP 96686 A 19960108

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 9252462	A		17	H04N-007/15	
US 6249324	B1			H04N-007/15	

Abstract (Basic): JP 9252462 A

The equipment has a **switch** (12) through which analog audio and video signals are input. A video capture (16) digitises the input **analog** signal. A video **encoder** (18) performs compression encoding to the digitised signal.

A selector (20) selects the compressed video data and provides the data to a network through a compression buffer (22). The compression buffer, the encoded video and audio data are encoded by an audio encoder.

ADVANTAGE - Reduces time loss due to **switching** .

Dwg.1/28

Title Terms: TRANSMIT; CONNECT; DEVICE; COMPUTER; NETWORK; TELEVISION; CONFER; SYSTEM; COMPRESS; BUFFER; COMPRESS; ENCODE; DATA; AUDIO; VIDEO; ENCODE; OUTPUT; NETWORK

Index Terms/Additional Words: CAMERA; MICROPHONE; SPEAKER; VIDEO; MONITOR

Derwent Class: W01; W02

International Patent Class (Main): **H04N-007/15**

International Patent Class (Additional): **H04N-007/24**

File Segment: EPI

14/5/43 (Item 12 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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010748376 \*\*Image available\*\*  
WPI Acc No: 1996-245331/199625  
XRPX Acc No: N96-205999

**Television receiver with teletext decoding function - has CPU which transmits character multiplex data to data entry processing circuit from terminal, through input-output processing circuit**

Patent Assignee: TOSHIBA KK (TOKE )  
Number of Countries: 001 Number of Patents: 001  
Patent Family:  
Patent No Kind Date Applicat No Kind Date Week  
JP 8098101 A 19960412 JP 94235729 A 19940929 199625 B

Priority Applications (No Type Date): JP 94235729 A 19940929

Patent Details:  
Patent No Kind Lan Pg Main IPC Filing Notes  
JP 8098101 A 18 H04N-005/445

Abstract (Basic): JP 8098101 A

The television receiver has an input-output data processing circuit (91) provided in a character multiplex decoder (90), that receives the data from an external appts through a terminal (92). The data transferred by a bus (22) is analyzed in a CPU. A display processing part (24) converts the data into corresponding image data and the data is supplied to a video output circuit (12) through a **RGB switching circuit** (9).

The image based on the data from the external appts, is displayed on a display screen of a picture tube (14). The CPU transmits the character multiplex data to a data entry processing circuit (21) from the terminal, through the input-output data processing circuit.

ADVANTAGE - Performs reliable transmission and reception of data between external appts.

Dwg.1/12

Title Terms: TELEVISION; RECEIVE; TELETEXT; DECODE; FUNCTION; CPU; TRANSMIT ; CHARACTER; MULTIPLEX; DATA; DATA; ENTER; PROCESS; CIRCUIT; TERMINAL; THROUGH; INPUT; OUTPUT; PROCESS; CIRCUIT

Derwent Class: T01; W03

International Patent Class (Main): H04N-005/445

International Patent Class (Additional): H04N-007/025 ; H04N-007/03 ;

H04N-007/035

File Segment: EPI

14/5/44 (Item 13 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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010620350 \*\*Image available\*\*  
WPI Acc No: 1996-117303/199612  
XRPX Acc No: N96-098041

**Video playback system with copy-protection function e.g. for TV receiver - has detector at analog input for sensing copy protection signal and disabling input if necessary, and senses copyright protection signature in digital signal, and may add authentication signal**

Patent Assignee: MACROVISION CORP (MACR-N); RYAN J O (RYAN-I)  
Inventor: RYAN J O; BRILL G D; RYAN J  
Number of Countries: 065 Number of Patents: 018

Patent Family:  
Patent No Kind Date Applicat No Kind Date Week  
WO 9603835 A2 19960208 WO 95US8843 A 19950712 199612 B  
AU 9531276 A 19960222 AU 9531276 A 19950712 199621  
WO 9603835 A3 19960404 WO 95US8843 A 19950712 199630  
US 5574787 A 19961112 US 94279542 A 19940725 199651  
EP 775418 A1 19970528 EP 95927166 A 19950712 199726

BR 9508340	A	19970909	WO 95US8843	A	19950712	
			BR 958340	A	19950712	199751
JP 10503338	W	19980324	WO 95US8843	A	19950712	
			WO 95US8843	A	19950712	199822
			JP 96505790	A	19950712	
KR 97705138	A	19970906	WO 95US8843	A	19950712	199839
			KR 97700516	A	19970125	
NZ 290521	A	19981028	NZ 290521	A	19950712	199901
			WO 95US8843	A	19950712	
AU 697727	B	19981015	AU 9531276	A	19950712	199902
MX 9700577	A1	19971201	MX 97577	A	19970122	199936
CA 2195939	C	20000125	CA 2195939	A	19950712	200025
			WO 95US8843	A	19950712	
EP 775418	B1	20000531	EP 95927166	A	19950712	200031
			WO 95US8843	A	19950712	
DE 69517324	E	20000706	DE 617324	A	19950712	200039
			EP 95927166	A	19950712	
			WO 95US8843	A	19950712	
CN 1159272	A	19970910	CN 95194901	A	19950712	200141
JP 3217068	B2	20011009	WO 95US8843	A	19950712	200164
			JP 96505790	A	19950712	
MX 204139	B	20010910	MX 97577	A	19970122	200239
KR 372598	B	20030516	WO 95US8843	A	19950712	200359
			KR 97700516	A	19970125	

Priority Applications (No Type Date): US 94279542 A 19940725

Cited Patents: EP 580367; EP 581227; EP 589459; US 5315448

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 9603835	A2	E	38	H04N-005/913	
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Designated States (National): AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TT UA UG UZ VN

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG

AU 9531276	A		H04N-005/913	Based on patent WO 9603835
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WO 9603835	A3		H04N-005/913	
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US 5574787	A	14	H04N-007/167	
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EP 775418	A1	E	H04N-005/913	Based on patent WO 9603835
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Designated States (Regional): AT BE CH DE DK GB IE IT LI NL SE

BR 9508340	A		H04N-005/913	Based on patent WO 9603835
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JP 10503338	W	39	H04N-005/91	Based on patent WO 9603835
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KR 97705138	A		G11B-020/10	Based on patent WO 9603835
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NZ 290521	A		G11B-020/00	Based on patent WO 9603835
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AU 697727	B		H04N-005/913	Previous Publ. patent AU 9531276
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Based on patent WO 9603835

MX 9700577	A1		H04N-005/913	
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CA 2195939	C	E	H04N-005/913	Based on patent WO 9603835
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EP 775418	B1	E	H04N-005/913	Based on patent WO 9603835
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Designated States (Regional): AT BE CH DE DK GB IE IT LI NL SE

DE 69517324	E		H04N-005/913	Based on patent EP 775418
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Based on patent WO 9603835

CN 1159272	A		H04N-005/913	
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JP 3217068	B2	17	H04N-005/91	Previous Publ. patent JP 10503338
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Based on patent WO 9603835

MX 204139	B		H04N-005/913	
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KR 372598	B		G11B-020/10	Previous Publ. patent KR 97705138
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Based on patent WO 9603835

Abstract (Basic): WO 9603835 A

The video appts. for reproducing digitally recorded material has a playback device connected to an output terminal via which a digital data signal is output. A first detector senses an authenticating signal within the output signal, and a second detector senses a copyright signal. The latter is present and the authenticating signal are coupled to an authenticating device. When the latter receives both signals a first **switch** is activated to couple the digital data to a first input



of a second **switch** and a descrambler.

The descrambler output is coupled to a second input of the second **switch**. The copyright signal is also coupled to a control element of the second **switch** to couple the output of the descrambler to a D/A converter, the first input of a third **switch** and a scrambler. The output of the scrambler is connected to a second input of the third **switch**, which couples a scrambled output when the copyright signature is present. A clear data signal is output otherwise. The copyright signature activates an analog anti-copy generator.

USE/ADVANTAGE - E.g. for VCR. Increased level of security against copying.

Dwg.1/4

Title Terms: VIDEO; PLAYBACK; SYSTEM; COPY; PROTECT; FUNCTION; TELEVISION; RECEIVE; DETECT; ANALOGUE; INPUT; SENSE; COPY; PROTECT; SIGNAL; DISABLE; INPUT; NECESSARY; SENSE; PROTECT; SIGNATURE; DIGITAL; SIGNAL; ADD; AUTHENTICITY; SIGNAL

Derwent Class: W02; W04

International Patent Class (Main): G11B-020/00; G11B-020/10; H04N-005/91; H04N-005/913; **H04N-007/167**

International Patent Class (Additional): H04N-005/44; H04N-005/92; H04N-005/94; H04N-009/79

File Segment: EPI

**14/5/45 (Item 14 from file: 350)**

DIALOG(R) File 350:Derwent WPIX

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010457529 \*\*Image available\*\*

WPI Acc No: 1995-358848/199546

XRPX Acc No: N95-266661

**Video signal processing system for recording computer generated animation - combines digital chrominance and luminance signals and converts them into composite analogue signal for recording on video tape**

Patent Assignee: APPLE COMPUTER INC (APPY )

Inventor: HEYL L F; KANNAPELL H N; STEVENSON D K

Number of Countries: 061 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9527378	A2	19951012	WO 95US4051	A	19950331	199546 B
AU 9522361	A	19951023	AU 9522361	A	19950331	199605
EP 701764	A1	19960320	EP 95915495	A	19950331	199616
			WO 95US4051	A	19950331	
US 5508812	A	19960416	US 93115402	A	19930901	199621
			US 94222603	A	19940401	
WO 9527378	A3	19951026	WO 95US4051	A	19950331	199621
JP 8511411	W	19961126	JP 95525876	A	19950331	199708
			WO 95US4051	A	19950331	
US 5621535	A	19970415	US 93115402	A	19930901	199721 N
			US 95403534	A	19950314	
EP 701764	B1	20000913	EP 95915495	A	19950331	200046
			WO 95US4051	A	19950331	
DE 69518805	E	20001019	DE 618805	A	19950331	200060
			EP 95915495	A	19950331	
			WO 95US4051	A	19950331	

Priority Applications (No Type Date): US 94222603 A 19940401; US 93115402 A 19930901; US 95403534 A 19950314

Cited Patents: No-SR.Pub; DE 3435169; EP 329812; EP 335401; EP 361819; US 5140408

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 9527378 A2 E 47 H04N-009/804

Designated States (National): AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ VN

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT KE LU MC

MW NL OA PT SD SE SZ UG

AU 9522361 A H04N-009/804 Based on patent WO 9527378  
EP 701764 A1 E 1 H04N-009/804 Based on patent WO 9527378  
Designated States (Regional): DE FR GB  
US 5508812 A 14 H04N-009/79 CIP of application US 93115402  
WO 9527378 A3 H04N-009/804  
JP 8511411 W 57 H04N-009/83 Based on patent WO 9527378  
US 5621535 A 9 H04N-009/79 Cont of application US 93115402  
EP 701764 B1 E H04N-009/804 Based on patent WO 9527378  
Designated States (Regional): DE FR GB  
DE 69518805 E H04N-009/804 Based on patent EP 701764  
Based on patent WO 9527378

Abstract (Basic): WO 9527378 A

The processing system includes a digital luminance signal generator, a multiplexer for luminance and chrominance signals and a digital store. A buffer reads multiplexed information from the store and passes it to a demultiplexer. A digital processor generates a filtered and frequency modulated luminance signal. A second digital signal processor generates filtered and amplitude modulated chrominance signals.

The chrominance and luminance signals are combined and a digital recording signal is generated. A d-a converter **changes** this signal for use with a given standard. The signal is then recorded onto a tape and the recorder is controlled.

USE/ADVANTAGE - For use with video cassette recorder. Creating and editing video movie which is a combination of video, graphics and sound data. Does not require composite TV signals to be generated. Fewer processing stages. Reduced noise and distortion. Reduced artifacts. Reduced smear. Improved alignment and calibration due to use of digital signal.

Dwg.1/9

Title Terms: VIDEO; SIGNAL; PROCESS; SYSTEM; RECORD; COMPUTER; GENERATE;  
ANIMATED; COMBINATION; DIGITAL; CHROMINANCE; LUMINOUS; SIGNAL; CONVERT;  
COMPOSITE; ANALOGUE; SIGNAL; RECORD; VIDEO; TAPE  
Derwent Class: T01; W04  
International Patent Class (Main): H04N-009/79; H04N-009/804; H04N-009/83  
International Patent Class (Additional): **H04N-007/00** ; H04N-009/80;  
H04N-009/808; H04N-011/00  
File Segment: EPI

14/5/47 (Item 16 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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010414244 \*\*Image available\*\*

WPI Acc No: 1995-315558/199541

XPX Acc No: N95-238503

**Shake-compensating image processor with interpolation - interpolates only green value in odd or even field of frame, and uses jump scanning system where interpolation of video data on odd-number field is carried out to origin**

Patent Assignee: BROTHER KOGYO KK (BRER ); XING INC (XING-N)

Inventor: AOYAMA Y; CHAYA N; HAYASHI K; NISHIKAWA H; TAKADA H

Number of Countries: 002 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 7212772	A	19950811	JP 945337	A	19940121	199541 B
US 5485218	A	19960116	US 95375685	A	19950120	199609
JP 3255323	B2	20020212	JP 945337	A	19940121	200213

Priority Applications (No Type Date): JP 945337 A 19940121

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 7212772	A		7	H04N-009/12	
US 5485218	A		12	H04N-007/01	

Abstract (Basic): JP 7212772 A

The appts. has a field memory (21) that stores digital video data with the red and blue component contained in the even-numbered field while the green component is contained in the odd-numbered field.

Every vertical-spacing period is scanned alternately in the horizontal direction. The green component is interpolated by a calculating circuit (23) based on the eye data of the n-line and the data of the (n1) division stored in the line memory (22).

ADVANTAGE - Simplifies appts since memory capacitance required for interpolation is reduced. Eliminates vertical shake without producing large clarity deterioration.

Dwg.1/4

Title Terms: SHAKE; COMPENSATE; IMAGE; PROCESSOR; INTERPOLATION; INTERPOLATION; GREEN; VALUE; ODD; EVEN; FIELD; FRAME; JUMP; SCAN; SYSTEM; INTERPOLATION; VIDEO; DATA; ODD; NUMBER; FIELD; CARRY; ORIGIN

Derwent Class: W03; W04

International Patent Class (Main): H04N-007/01 ; H04N-009/12; H04N-009/64

International Patent Class (Additional): H04N-011/20

File Segment: EPI

14/5/48 (Item 17 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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010320806 \*\*Image available\*\*

WPI Acc No: 1995-222078/199529

XRPX Acc No: N95-174147

**Demodulator for image signal converter - incorporates DSP to demodulate the SSTV signal and compute change per edit time of angular frequency**

Patent Assignee: TASCOS DENKI KK (TASC-N); TASCOS ELECTRONICS CO LTD (TASC-N)

Inventor: YOSHIKAZU N

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 7135612	A	19950523	JP 93304575	A	19931111	199529 B
US 5568185	A	19961022	US 94333731	A	19941103	199648

Priority Applications (No Type Date): JP 93304575 A 19931111

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 7135612	A		13	H04N-005/445	
US 5568185	A		18	H04N-007/00	

Abstract (Basic): JP 7135612 A

The demodulator is applicable to an image signal connector which consists of an AGC circuit (4) to which analog SSTV signal of low speed scanning level with a simple fixed range in input. An A/D converter (6) converts this analog SSTV signal into digital signal. A DSP (7) to which a ROM (8) is connected takes and stores the digital signal. The signal processing program counter read from the ROM and enables the DSP to perform the signal processing. The output of the DSP which determines the angular frequency of SSTV signal. The SSTV signal is demodulated and the **change** per unit time of angular frequency is also computed by the DSP. The demodulated signal is stored in a video frame memory (9) using this demodulator a composite **encoder** (10) reproduces the **analog** signal and analog signal obtained is displayed on the monitor of a TV image receiver (3).

ADVANTAGE - Raises S/N ratio. Demodulates SSTV signals with sufficient linearity.

Dwg.2/5

Title Terms: DEMODULATE; IMAGE; SIGNAL; CONVERTER; INCORPORATE; DEMODULATE; SIGNAL; COMPUTATION; **CHANGE** ; PER; EDIT; TIME; ANGULAR; FREQUENCY

Derwent Class: U22; U23; W03; W04

International Patent Class (Main): H04N-005/445; H04N-007/00

International Patent Class (Additional): H03D-003/00  
File Segment: EPI

14/5/49 (Item 18 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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010242197 \*\*Image available\*\*  
WPI Acc No: 1995-143452/199519  
XRPX Acc No: N95-113106

**M.U.S.E - NTSC conversion type signal receiver - selects either M.U.S.E signal or NTSC original and supplies it to RGB converter for reproduction**  
Patent Assignee: TOSHIBA AVE KK (TOSA ); TOSHIBA KK (TOKE )  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 7067080	A	19950310	JP 93207516	A	19930823	199519 B

Priority Applications (No Type Date): JP 93207516 A 19930823  
Patent Details:  
Patent No Kind Lan Pg Main IPC Filing Notes  
JP 7067080 A 8 H04N-007/01

Abstract (Basic): JP 7067080 A

The receiver circuit consists of a Y/C isolation circuit (107) which isolates first luminance signal and first and second colour difference signal of the NTSC signal. A demodulator (108) demodulates the colour difference signal and applies it with the luminance signal to a **switching** circuit (14). A matrix circuit (110) finds difference between first matrix coefficient and NTSC standard reverse matrix coefficient and obtains RGB primary colour signal.

A M.U.S.E - NTSC converter (105) converts M.U.S.E signal to NTSC signal and obtains luminance and colour difference signal. A matrix correction circuit (115) corrects the second matrix coefficients such that it resembles the reverse matrix coefficients of muse signal. The relative amplitude of the colour difference signal is regulated and transmitted to **switching** circuit (114). This **switching** circuit selects either M.U.S.E signal or NTSC signal and supplies it to **RGB converter circuit**.

**ADVANTAGE** - Obtains suitable colour reproduction to both system signal by simple circuit composition.

Dwg.1/3

Title Terms: NTSC; CONVERT; TYPE; SIGNAL; RECEIVE; SELECT; SIGNAL; NTSC;  
ORIGINAL; SUPPLY; RGB; CONVERTER; REPRODUCE  
Derwent Class: W03  
International Patent Class (Main): H04N-007/01  
File Segment: EPI

14/5/53 (Item 22 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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009347648 \*\*Image available\*\*  
WPI Acc No: 1993-041121/199305  
XRPX Acc No: N93-031559

**Video tape recorder for teletext broadcasting - has RGB signal output circuit , recorded mode detector and mode switching circuit, for outputting signals in TV image. NoAbstract**

Patent Assignee: SANYO ELECTRIC CO (SAOL )  
Number of Countries: 001 Number of Patents: 002  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 4367181	A	19921218	JP 91143033	A	19910614	199305 B
JP 3054465	B2	20000619	JP 91143033	A	19910614	200033

Priority Applications (No Type Date): JP 91143033 A 19910614

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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JP 4367181	A		5	H04N-005/93	
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JP 3054465	B2		5	H04N-005/93	Previous Publ. patent JP 4367181
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Title Terms: VIDEO; TAPE; RECORD; TELETEXT; BROADCAST; RGB; SIGNAL; OUTPUT;  
CIRCUIT; RECORD; MODE; DETECT; MODE; **SWITCH** ; CIRCUIT; OUTPUT; SIGNAL;  
TELEVISION; IMAGE; NOABSTRACT

Derwent Class: W04

International Patent Class (Main): H04N-005/93

International Patent Class (Additional): H04N-005/44; **H04N-007/025 ;**

**H04N-007/03 ; H04N-007/035 ; H04N-007/08**

File Segment: EPI

14/5/57 (Item 26 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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007826946

WPI Acc No: 1989-092058/198912

XRPX Acc No: N89-069907

**TV signal differential pulse encoder - has decoder inputs connected to  
corresponding outputs of quantiser**

Patent Assignee: KULIKOV S A (KULI-I)

Inventor: HULIKOV S A; SARDYKO S V

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 1424125	A	19880915				198912 B

Priority Applications (No Type Date): SU 0 A 19860707; SU 4083774 A  
19860707

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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SU 1424125	A		4		
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Abstract (Basic): SU 1424125.A

**Encoder** contains **analog** -digital converter (1), memory (2) multiplier (3), summators (4,5), inverters (5,12) quantiser (8), **switching** unit (9), decoder (13) and encoder (14). Due to the use of **switching** units (10,11) the algorithm of the reduction of the coordinate redundancy is achieved without deterioration of the visual quality of transmitted signals.

USE/ADVANTAGE - Encoder suitable for communication can be used for a design of digital TV systems. It has advantage of increased information capacity achieved. Bul.34/15.9.88 (4pp Dwg.No.1/1

Title Terms: TELEVISION; SIGNAL; DIFFERENTIAL; PULSE; ENCODE; DECODE; INPUT  
; CONNECT; CORRESPOND; OUTPUT; QUANTUM

Derwent Class: U21; W02; W04

International Patent Class (Additional): H03M-007/36; **H04N-007/12**

File Segment: EPI

14/5/58 (Item 27 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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007465910

WPI Acc No: 1988-099844/198815

XRPX Acc No: N88-075711

**Multiple TV standards input selector and converter - selects video signal  
and converts it to standard format video signal for further processing by  
digital video effects device**

Patent Assignee: GRASS VALLEY GROUP INC (GRAV ); GRASS VALLEY GRP IN  
(GRAS-N)

Inventor: BANNISTER R S; BLECKSMITH J E

Number of Countries: 007 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 263393	A	19880413	EP 87114143	A	19870928	198815 B
US 4743958	A	19880510	US 86915821	A	19861006	198821
AU 8779355	A	19880414				198823
JP 63098289	A	19880428				198823
CA 1271835	A	19900717				199034
EP 263393	B1	19930811	EP 87114143	A	19870928	199332
DE 3786975	G	19930916	DE 3786975	A	19870928	199338
			EP 87114143	A	19870928	

Priority Applications (No Type Date): US 86915821 A 19861006

Cited Patents: A3...9019; FR 2526618; No-SR.Pub; US 4301475

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 263393	A	E	6		

Designated States (Regional): DE FR GB

US 4743958 A 5

EP 263393 B1 E 8 H04N-005/268

Designated States (Regional): DE FR GB

DE 3786975 G H04N-005/268 Based on patent EP 263393

Abstract (Basic): EP 263393 A

The input selector and converter comprises appts. for selecting one video input source from a number of sources. The video signal is converted from the selected source to an output video signal having a predetermined standard television format.

The selector and converter are controlled according to the standard television format of the selected video input source so that the transition to the selected source occurs within a single vertical interval between fields of the video signal. Synchronisation and timing signals for the converter are derived from the selected source.

ADVANTAGE - No visible effect appears upon display when switching between video source.

0/3

Title Terms: MULTIPLE; TELEVISION; STANDARD; INPUT; SELECT; CONVERTER;

SELECT; VIDEO; SIGNAL; CONVERT; STANDARD; FORMAT; VIDEO; SIGNAL; PROCESS;

DIGITAL; VIDEO; EFFECT; DEVICE

Derwent Class: W04

International Patent Class (Main): H04N-005/268

International Patent Class (Additional): H04N-005/26; H04N-007/01 ;

H04N-011/22

File Segment: EPI

14/5/61 (Item 30 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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004117980

WPI Acc No: 1984-263521/198442

XRPX Acc No: N84-197012

Encryption of multiplexed analog component television signal -

rearranging blocks of divided chrominance or luminance sections without changing information order in blocks

Patent Assignee: INDEPENDENT BROADCASTING AUTH (INDE-N); LODGE N K (LODG-I)

Inventor: FLANNIGAN B A; MASON A G

Number of Countries: 012 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 8404013	A	19841011	WO 84GB106	A	19840328	198442 B
EP 137847	A	19850424	EP 84901595	A	19840328	198517
JP 60500938	W	19850620	JP 84501601	A	19840328	198531
US 4757531	A	19880712	US 84678543	A	19841120	198830
EP 137847	B	19881221				198851
DE 3475742	G	19890126				198905

Priority Applications (No Type Date): GB 8317797 A 19830630; GB 838482 A 19830328

Cited Patents: EP 103339; FR 2431809; WO 8102499; WO 8303942

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 8404013 A E 25

Designated States (National): JP

Designated States (Regional): AT BE CH DE FR GB LU NL SE US

EP 137847 A E

Designated States (Regional): AT BE CH DE FR GB LI LU NL SE

EP 137847 B E

Designated States (Regional): AT BE CH DE FR GB LI LU NL SE

Abstract (Basic): EP 137847 A

A method of scrambling a line of a television signal comprising chrominance and luminance signals, comprising the steps of: generating of the chrominance and luminance signals, storing the chrominance and luminance samples in a first order, and reading out the chrominance and luminance

in a second order different from the first; characterised in that the line of a television signal comprises time multiplexed blocks of digital signals, chrominance signals and luminance signals respectively, and the storing and reading out steps comprise dividing the block of chrominance signals into two sections and outputting a scrambled signal comprising one section of chrominance signals disposed in time between the digital signals and the luminance signals and the other section of chrominance signals disposed in time after the luminance signals, the information within each section of chrominance signals being read out in the same order as when stored.

(13pp)

Title Terms: ENCRYPTION; MULTIPLEX; ANALOGUE; COMPONENT; TELEVISION; SIGNAL ; REARRANGE; BLOCK; DIVIDE; CHROMINANCE; LUMINOUS; SECTION; **CHANGE** ; INFORMATION; ORDER; BLOCK

Derwent Class: W02; W03

International Patent Class (Additional): H04N-007/16

File Segment: EPI

14/5/62 (Item 31 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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001337436

WPI Acc No: 1975-N1371W/197549

**Digital encoder for colour TV signals - encodes difference between analog signal values spaced by given number of subcarrier cycles**

Patent Assignee: UK POST OFFICE (POSM )

Number of Countries: 004 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 3921204	A	19751118				197549 B
CA 1007749	A	19770329				197715
DE 2241457	B	19790315				197912
NL 173344	B	19830801				198333

Priority Applications (No Type Date): GB 7140309 A 19710827

Abstract (Basic): US 3921204 A

The methods of encoding include comparing the instantaneous value of the analogue signal with a previously occurring value, which conveniently is spaced by one or more cycles of the subcarrier from the instantaneous value, and then encoding the difference between the two values. From an N.T.S.C. signal the spacing between the two values may be one cycle of the sub-carrier wave, or about one line of the scan, the actual spacing being an integral number of cycles of the sub-carrier wave, or both differences can be combined to produce a diagonal difference signal. The same spacings can be used for a PAL

signal if a PAL modifier is used otherwise a vertical spacing of two lines is necessary because of the **change** of phase of the sub-carrier in alternate lines.

Title Terms: DIGITAL; ENCODE; COLOUR; TELEVISION; SIGNAL; ENCODE; DIFFER; ANALOGUE; SIGNAL; VALUE; SPACE; NUMBER; SUBCARRIER; CYCLE

Derwent Class: U21; U22; W02; W03; W04

International Patent Class (Additional): H03K-013/22; H04N-005/40;

**H04N-007/13** ; H04N-009/40

File Segment: EPI



Set	Items	Description
S1	1942	ANALOG(3N) (ENCRYPT? OR ENCODE? OR CIPHER? ? OR CYPHER? ? OR CRYPTO? OR (SECURITY OR PUBLIC OR PRIVATE OR MASTER OR PASS)- ( ) (KEY OR KEYS) OR PKI)
S2	4400	(RGB OR RED OR GREEN OR BLUE) (2N) (LINE? OR CONNECTION? OR - CIRCUIT OR PATH? OR WIRE OR WIRES)
S3	1342654	SWAP? OR SWITCH? OR CHANG? OR FLIP() FLOP OR EXCHANG?
S4	29536	(PSEUDORANDOM? OR RANDOM? OR HAPHAZARD? OR UNORDER? OR DIS- ORDER? OR UNORGANI? OR ORDERLESS) (3N) (SEQUENC? OR NUMBER? OR GENERAT?)
S5	12	S1 (S) S2
S6	827	S2 (S) S3
S7	40	S6 (S) S4
S8	58	S2 (S) S4
S9	2	S6 (S) S1
S10	308	S1 (S) S3
S11	16	S10 (S) S4
S12	87	S5 OR S7 OR S8 OR S9 OR S11
S13	10	S12 AND IC=H04N?

File 348:EUROPEAN PATENTS 1978-2003/Sep W04  
(c) 2003 European Patent Office  
File 349:PCT FULLTEXT 1979-2002/UB=20031002,UT=20030925  
(c) 2003 WIPO/Univentio

13/5,K/1 (Item 1 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

01538332

**Image data conversion processing device**

**Verarbeitungseinrichtung für die Bilddatenumwandlung**

**Dispositif pour le traitement d'information pour la conversion de données d'image**

**PATENT ASSIGNEE:**

FUJITSU LIMITED, (211463), 1-1, Kamikodanaka 4-chome, Nakahara-ku,  
Kawasaki-shi, Kanagawa 211-8588, (JP), (Applicant designated States:  
all)

**INVENTOR:**

Nakamoto, Makoto, Fujitsu Limited, 1-1 Kamikodanaka 4-chome, Nakahara-ku,  
Kawasaki-shi, Kanagawa 211-8588, (JP)  
Nakamura, Satoshi, Fujitsu Limited, 1-1 Kamikodanaka 4-chome, Nakahara-ku,  
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Kawasaki-shi, Kanagawa 211-8588, (JP)

**LEGAL REPRESENTATIVE:**

Mohun, Stephen John et al (76153), Haseltine Lake & Co., Imperial House,  
15-19 Kingsway, London WC2B 6UD, (GB)

PATENT (CC, No, Kind, Date): EP 1282313 A2 030205 (Basic)

EP 1282313 A3 030312

APPLICATION (CC, No, Date): EP 2002018472 930818;

PRIORITY (CC, No, Date): JP 92219309 920818; JP 93169159 930708

DESIGNATED STATES: DE; ES; FR; GB; IT; NL

RELATED PARENT NUMBER(S) - PN (AN):

EP 588499 (EP 93306506)

INTERNATIONAL PATENT CLASS: H04N-007/01

**ABSTRACT EP 1282313 A3**

An image data conversion processing device includes an issue unit (8), plural line storing units (3) and a generating unit (4) for converting to a television signal image data stored in plural kinds of developing formats in a storing unit. The image data comprises plural lines, and the television signal comprises a predetermined number of lines. The issue unit issues a transmission instruction of image data to the storing unit in accordance with a period specified by a ratio of the line number of the image data to be converted and the line number of the television signal. The plural line storing units cyclically stores the image data transmitted from the storing unit line by line on the basis of the transmission instruction of the issue unit. In synchronism with the horizontal synchronizing signal of the television signal, the generating unit multiplies the image data stored in the line storing unit by an interpolative coefficient corresponding to the developing format of the image data to be converted in the plural interpolative coefficients which are beforehand set for the plural kinds of developing formats, thereby generating the television signal.

Such a device is capable of automatically generating television signals having desirably good display performance from image data of various different formats held in a Video RAM, without using multiple sets of hardware.

ABSTRACT WORD COUNT: 222

**NOTE:**

Figure number on first page: 40

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 030205 A2 Published application without search report  
Search Report: 030312 A3 Separate publication of the search report  
LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200306	895
SPEC A	(English)	200306	17806
Total word count - document A			18701
Total word count - document B			0
Total word count - documents A + B			18701

INTERNATIONAL PATENT CLASS: H04N-007/01

...SPECIFICATION by the multiplexer 13.

The selector 18 selects any one of the image data converted by the RGB matrix circuit 10 and the television signal output from the logical operation circuit 16. An NTSC encoder 19 encodes...

...into an NTSC signal. A D/A converter 20 converts a digital signal output from the NTSC encoder 19 to an analog signal and then output the analog signal to the television device 40.

A line buffer write-in...

13/5,K/2 (Item 2 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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01538331

Image data conversion processing device

Verarbeitungseinrichtung für die Bilddatenumwandlung

Dispositif pour le traitement d'information pour la conversion de données d'image

PATENT ASSIGNEE:

FUJITSU LIMITED, (211463), 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588, (JP), (Applicant designated States: all)

INVENTOR:

Nakamoto, Makoto, Fujitsu, 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588, (JP)  
Nakamura, Satoshi, Fujitsu, 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588, (JP)  
Takayama, Akinori, Fujitsu, 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588, (JP)  
Takahashi, Kazunori, Fujitsu, 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588, (JP)  
Takigami, Akio, Fujitsu, 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588, (JP)  
Sato, Yasuo, Fujitsu, 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588, (JP)  
Ito, Chiaki, Fujitsu, 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588, (JP)  
Aoki, Yoichi, Fujitsu, 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588, (JP)

LEGAL REPRESENTATIVE:

Mohun, Stephen John (76153), Haseltine Lake & Co., Imperial House, 15-19 Kingsway, London WC2B 6UD, (GB)

PATENT (CC, No, Kind, Date): EP 1282312 A2 030205 (Basic)  
EP 1282312 A3 030312

APPLICATION (CC, No, Date): EP 2002018471 930818;

PRIORITY (CC, No, Date): JP 92219309 920818; JP 93169159 930708

DESIGNATED STATES: DE; ES; FR; GB; IT; NL

RELATED PARENT NUMBER(S) - PN (AN):

EP 588499 (EP 93306506)

INTERNATIONAL PATENT CLASS: H04N-007/01

ABSTRACT EP 1282312 A3

An image data conversion processing device includes an issue unit (8), plural line storing units (3) and a generating unit (4) for converting to a television signal image data stored in plural kinds of developing formats in a storing unit. The image data comprises plural lines, and the television signal comprises a predetermined number of lines. The issue unit issues a transmission instruction of image data to the storing unit in accordance with a period specified by a ratio of the line number of the image data to be converted and the line number of the television signal. The plural line storing units cyclically stores the image data transmitted from the storing unit line by line on the basis of the transmission instruction of the issue unit. In synchronism with the horizontal synchronizing signal of the television signal, the generating unit multiplies the image data stored in the line storing unit by an interpolative coefficient corresponding to the developing format of the image data to be converted in the plural interpolative coefficients which are beforehand set for the plural kinds of developing formats, thereby generating the television signal.

Such a device is capable of automatically generating television signals having desirably good display performance from image data of various different formats held in a Video RAM, without using multiple sets of hardware.

ABSTRACT WORD COUNT: 222

NOTE:

Figure number on first page: 2

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 030205 A2 Published application without search report

Search Report: 030312 A3 Separate publication of the search report

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200306	1224
SPEC A	(English)	200306	17848
Total word count - document A			19072
Total word count - document B			0
Total word count - documents A + B			19072

INTERNATIONAL PATENT CLASS: H04N-007/01

...SPECIFICATION by the multiplexer 13.

The selector 18 selects any one of the image data converted by the RGB matrix circuit 10 and the television signal output from the logical operation circuit 16. An NTSC encoder 19 encodes....

...into an NTSC signal. A D/A converter 20 converts a digital signal output from the NTSC encoder 19 to an analog signal and then output the analog signal to the television device 40.

A line buffer write-in...

13/5,K/3 (Item 3 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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01535365

Image data conversion processing device

Verarbeitungseinrichtung für die Bilddatenumwandlung

Dispositif pour le traitement d'information pour la conversion de données d'image

PATENT ASSIGNEE:

FUJITSU LIMITED, (211463), 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588, (JP), (Applicant designated States: all).

INVENTOR:

Nakamoto, Makoto, Fujitsu Ltd., 1-1, Kamikodanaka 4-chome, Nakahara-ku,

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Nakamura, Satoshi, Fujitsu Ltd., 1-1, Kamikodanaka4-chome, Nakahara-ku,  
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Takayama, Akinori, Fujitsu Ltd., 1-1, Kamikodanaka4-chome, Nakahara-ku,  
Kawasaki-shi, Kanagawa 211-8588, (JP)  
Takahashi, Kazunori, Fujitsu Ltd., 1-1, Kamikodanaka4-chome, Nakahara-ku,  
Kawasaki-shi, Kanagawa 211-8588, (JP)  
Takigami, Akio, Fujitsu Ltd., 1-1, Kamikodanaka4-chome, Nakahara-ku,  
Kawasaki-shi, Kanagawa 211-8588, (JP)  
Sato, Yasuo, Fujitsu Ltd., 1-1, Kamikodanaka4-chome, Nakahara-ku,  
Kawasaki-shi, Kanagawa 211-8588, (JP)  
Ito, Chiaki, Fujitsu Ltd., 1-1, Kamikodanaka4-chome, Nakahara-ku,  
Kawasaki-shi, Kanagawa 211-8588, (JP)  
Aoki, Yoichi, Fujitsu Ltd., 1-1, Kamikodanaka4-chome, Nakahara-ku,  
Kawasaki-shi, Kanagawa 211-8588, (JP)

LEGAL REPRESENTATIVE:

Mohun, Stephen John et al (76153), Haseltine Lake & Co., Imperial House,  
15-19 Kingsway, London WC2B 6UD, (GB)

PATENT (CC, No, Kind, Date): EP 1280349 A2 030129 (Basic)

APPLICATION (CC, No, Date): EP 2002018505 930818;

PRIORITY (CC, No, Date): JP 92219309 920818; JP 93169159 930708

DESIGNATED STATES: DE; ES; FR; GB; IT; NL

RELATED PARENT NUMBER(S) - PN (AN):

EP 588499 (EP 93306506)

INTERNATIONAL PATENT CLASS: H04N-007/01

ABSTRACT EP 1280349 A2

An image data conversion processing device includes an issue unit (8), plural line storing units (3) and a generating unit (4) for converting to a television signal image data stored in plural kinds of developing formats in a storing unit. The image data comprises plural lines, and the television signal comprises a predetermined number of lines. The issue unit issues a transmission instruction of image data to the storing unit in accordance with a period specified by a ratio of the line number of the image data to be converted and the line number of the television signal. The plural line storing units cyclically stores the image data transmitted from the storing unit line by line on the basis of the transmission instruction of the issue unit. In synchronism with the horizontal synchronizing signal of the television signal, the generating unit multiplies the image data stored in the line storing unit by an interpolative coefficient corresponding to the developing format of the image data to be converted in the plural interpolative coefficients which are beforehand set for the plural kinds of developing formats, thereby generating the television signal.

Such a device is capable of automatically generating television signals having desirably good display performance from image data of various different formats held in a Video RAM, without using multiple sets of hardware.

ABSTRACT WORD COUNT: 222

NOTE:

Figure number on first page: 28

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 030129 A2 Published application without search report

LANGUAGE (Publication, Procedural, Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200305	934
SPEC A	(English)	200305	17804
Total word count - document A			18738
Total word count - document B			0
Total word count - documents A + B			18738

INTERNATIONAL PATENT CLASS: H04N-007/01

...SPECIFICATION by the multiplexer 13.

The selector 18 selects any one of the image data converted by the RGB

matrix **circuit** 10 and the television signal output from the logical operation circuit 16. An NTSC encoder 19 encodes...

...into an NTSC signal. A D/A converter 20 converts a digital signal output from the NTSC **encoder** 19 to an **analog** signal and then output the analog signal to the television device 40.

A line buffer write-in...

13/5,K/4 (Item 4 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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01417338

**Video apparatus delivering video signals, notably S-Video signals**

**Videosignale insbesondere S-Videosignalen liefernde Videovorrichtung**

**Appareil video delivrant des signaux video notamment des signaux S-video**

PATENT ASSIGNEE:

Thomson Licensing S.A., (2880641), 46, quai A.Le Gallo, 92100

Boulogne-Billancourt, (FR), (Applicant designated States: all)

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Tan, Chee Lam, Block 520, Woodlands Drive 14, Apt 06-297, Singapore

730520, (SG)

Zhou, Qing Jin, Block 829, Yishun Street, Apt 12-494, Singapore 760829,

(SG)

LEGAL REPRESENTATIVE:

Bonnans, Arnaud et al (91653), Thomson multimedia 46, quai Alphonse Le

Gallo, 92648 Boulogne Billancourt Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 1198142 A1 020417 (Basic)

APPLICATION (CC, No, Date): EP 2001120050 010821;

PRIORITY (CC, No, Date): EP 2000402563 000915

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;

LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: **H04N-009/64 ; H04N-005/445**

ABSTRACT EP 1198142 A1

A video apparatus has a video source (2) with a luminance output (Y2))) carrying a first luminance signal and a chrominance output (C2))) carrying a chrominance signal, an OSD circuit (4) generating OSD signals (R, G, B) and a fast-blanking signal (FB), and a connector (16) for delivering video signals.

A converter (6) outputs a second luminance signal (YOSD))) based on the OSD signals and a first switch (10) controlled by the fast-blanking signal (FB) selectively connects the converter (6) or the luminance output (Y2))) to the connector (16).

Preferably, a second switch (10) controlled by the fast-blanking signal (FB) selectively connects the chrominance output (C2))) or a circuit generating a constant chrominance signal (Vref))) to the connector (16).

ABSTRACT WORD COUNT: 120

NOTE:

Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 020417 A1 Published application with search report

Examination: 021211 A1 Date of request for examination: 20021003

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
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CLAIMS A	(English)	200216	261
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SPEC A	(English)	200216	1136
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Total word count - document A	1397
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Total word count - document B	0
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Total word count - documents A + B	1397
------------------------------------	------

INTERNATIONAL PATENT CLASS: **H04N-009/64 ...**

... H04N-005/445

...SPECIFICATION wherein a YUV signal representing an OSD picture is superimposed on a YUV signal from a NTSC **encoder** by an **analog switch**. However, this solution needs using an OSD circuit generating a YUV signal (or a signal easily convertivle to YUV), which is not conventional ; or, when using a conventional OSD **circuit** generating analogue **RGB** signals, a costly dedicated RGB to YUV converter must be provided in addition.

The invention aims at...

13/5,K/5 (Item 5 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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01402633

**Video signal processing apparatus**

**Videosignalverarbeitungsgerat**

**Appareil de traitement de signaux video**

PATENT ASSIGNEE:

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD., (216880), .1006, Ohaza Kadoma, Kadoma-shi, Osaka 571-8501, (JP), (Applicant designated States: all)

INVENTOR:

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Kuroda, Keiichi, 2-7, Asakura, Okubocho, Uji-shi, Kyoto 611-0033, (JP)

LEGAL REPRESENTATIVE:

Schwabe - Sandmair - Marx (100951), Stuntzstrasse 16, 81677 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1187493 A2 020313 (Basic)

EP 1187493 A3 030409

APPLICATION (CC, No, Date): EP 2001118851 010814;

PRIORITY (CC, No, Date): JP 2000272811 000908

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;

LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: **H04N-009/68**

ABSTRACT EP 1187493 A2

A video signal processing apparatus for processing a video signal containing first and second color difference signals so as to adjust colors of an image represented by the video signal is provided. The video signal processing apparatus comprises a first gain setting section for setting a first gain conversion characteristic relevant to a first saturation indicated by the first color difference signal, a second gain setting section for setting a second gain conversion characteristic relevant to a second saturation indicated by the second color difference signal, a third gain setting section for setting a third gain conversion characteristic relevant to a third saturation indicated by the first and second color difference signals, a first conversion section for converting a gain of the first color difference signal based on a first input value of the first color difference signal, the first gain conversion characteristic, and the third gain conversion characteristic, and a second conversion section for converting a gain of the second color difference signal based on a second input value of the second color difference signal, the second gain conversion characteristic, and the third gain conversion characteristic.

ABSTRACT WORD COUNT: 188

NOTE:

Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 020313 A2 Published application without search report

Search Report: . 030409 A3 Separate publication of the search report

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200211	1316

SPEC A (English) 200211 12526  
Total word count - document A 13842  
Total word count - document B 0  
Total word count - documents A + B 13842

INTERNATIONAL PATENT CLASS: H04N-009/68

...SPECIFICATION present invention. The videosignal processing apparatus 100 includes a pickup 2, a color difference video signal reproducing **circuit** 4, a **red** gain setting section 12, a blue gain setting section 13, a green gain setting section 14, a...

...the green gain conversion characteristic 109, and outputs a gain-converted second color difference signal 105. The **encoder** 5 generates an **analog** video signal suitable for display on a monitor (not shown) based on the first color difference signal...omitted.

The video signal processing apparatus 200 includes a pickup 2, a color difference video signal reproducing **circuit** 4, a **red** offset setting section 40, a blue offset setting section 41, a green offset setting section 42, a...

...the green offset conversion characteristic 209, and outputs a gain-converted second color difference signal 205. The **encoder** 5 generates an **analog** video signal suitable for display on a monitor (not shown) based on the first color difference signal...

13/5,K/6 (Item 6 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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00711606

**Start code detector for image sequences**  
**Detektor für den Startcode von Bildsequenzen**  
**Detecteur de code de départ pour séquences d'images**  
PATENT ASSIGNEE:

DISCOVISION ASSOCIATES, (260273), 2355 Main Street Suite 200, Irvine, CA 92714, (US), (Proprietor designated states: all)

INVENTOR:

Wise, Adrian Philip, 10 Westbourne Cottages, Frenchay, Bristol BS16 1NA, (GB)

Sothoran, Martin William, The Ridings, Wick Lane, Stinchcombe, Dursley, Gloucestershire GL11 6BD, (GB)

Robbins, William Philip, 19 Springhill, Cam, Gloucestershire GL11 5PE, (GB)

Finch, Helen Rosemary, Tyley, Coombe, Wotton-Under-Edge, Gloucester. GL12 7ND, (GB)

Boyd, Kevin James, 21 Lancashire Road, Bristol BS7 9DL, (GB)

LEGAL REPRESENTATIVE:

Vuillermoz, Bruno et al (72791), Cabinet Laurent & Charras B.P. 32 20, rue Louis Chirpaz, 69131 Ecully Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 674443 A2 950927 (Basic)  
EP 674443 A3 951213  
EP 674443 A3 981223  
EP 674443 B1 010509

APPLICATION (CC, No, Date): EP 95301301 950228;

PRIORITY (CC, No, Date): GB 9405914 940324

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IE; IT; LI; NL

RELATED DIVISIONAL NUMBER(S) - PN (AN):

EP 891089 (EP 98202149)  
(EP 98202154)

EP 884910 (EP 98202132)

EP 891088 (EP 98202133)

EP 897244 (EP 98202134)

EP 901286 (EP 98202135)

EP 901287 (EP 98202166)

EP 896473 (EP 98202170)



EP 896474 (EP 98202171)  
EP 896476 (EP 98202174)  
EP 896475 (EP 98202172)

INTERNATIONAL PATENT CLASS: H04N-007/24 ; G06F-013/00; G06F-009/38

CITED PATENTS (EP B): EP 288219 A; EP 460751 A; EP 506294 A; EP 551672 A;  
EP 572263 A; EP 572766 A; EP 576749 A; EP 577329 A; EP 602621 A; WO  
94/25935 A; GB 2269070 A; US 4622585 A; US 4823201 A; US 5173695 A; US  
5253053 A

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XP000235934 INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS  
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CONSUMER ELECTRONICS, ROSEMONT, JUNE 8 - 10, 1993, no. CONF. 12, 8 June  
1993, page 294/295 XP000427624 INSTITUTE OF ELECTRICAL AND ELECTRONICS  
ENGINEERS  
YONG M CHONG: "A DATA-FLOW ARCHITECTURE FOR DIGITAL IMAGE PROCESSING"  
WESCON CONFERENCE RECORD, 1 January 1984, pages 4/6 1-4/6 10,  
XP000565437;

ABSTRACT EP 674443 A2

A multi-standard video decompression apparatus has a plurality of  
stages interconnected by a two-wire interface arranged as a pipeline  
processing machine. Control tokens and DATA Tokens pass over the single  
two-wire interface for carrying both control and data in token format. A  
token decode circuit is positioned in certain of the stages for  
recognizing certain of the tokens as control tokens pertinent to that  
stage and for passing unrecognized control tokens along the pipeline.  
Reconfiguration processing circuits are positioned in selected stages and  
are responsive to a recognized control token for reconfiguring such stage  
to handle an identified DATA Token.

ABSTRACT WORD COUNT: 102

NOTE:

Figure number on first page: 61

LEGAL STATUS (Type, Pub Date, Kind, Text):

Grant: 010509 B1 Granted patent  
Application: 950927 A2 Published application (Alwith Search Report  
;A2without Search Report)  
Lapse: 030219 B1 Date of lapse of European Patent in a  
contracting state (Country, date): AT  
20010509, BE 20010509, CH 20010509, LI  
20010509, NL 20010509,  
Lapse: 020410 B1 Date of lapse of European Patent in a  
contracting state (Country, date): AT  
20010509, BE 20010509, CH 20010509, LI  
20010509,  
Lapse: 020320 B1 Date of lapse of European Patent in a  
contracting state (Country, date): BE  
20010509,

Lapse: 020403 B1 Date of lapse of European Patent in a contracting state (Country, date): AT 20010509, BE 20010509,  
 Oppn None: 020502 B1 No opposition filed: 20020212  
 Search Report: 951213 A3 Separate publication of the European or International search report  
 \*Search Report: 960110 A2 Separate publication of European or Intl search report (change)  
 Change: 971022 A2 Representative (change)  
 Change: 980304 A2 Obligatory supplementary classification (change)  
 Examination: 981104 A2 Date of filing of request for examination: 980908  
 Search Report: 981223 A3 Separate publication of the European or International search report  
 Examination: 990324 A2 Date of despatch of first examination report: 990208

LANGUAGE (Publication,Procedural,Application): English; English; English  
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	2897
CLAIMS B	(English)	200119	647
CLAIMS B	(German)	200119	609
CLAIMS B	(French)	200119	752
SPEC A	(English)	EPAB95	128616
SPEC B	(English)	200119	122384
Total word count - document A			131543
Total word count - document B			124392
Total word count - documents A + B			255935

INTERNATIONAL PATENT CLASS: H04N-007/24 ...

...SPECIFICATION output from the output data latch LDOUT may similarly pass through an arbitrary and optional combinatorial logic **circuit** B2 before being passed onward as OUT...Cu/b), and the other chrominance block 214 contains a representation of the chrominance level of the **red** color signal (Cv/r). Each chrominance level is subsampled such that each 8 x 8 chrominance block...

13/5,K/7 (Item 7 from file: 348)  
 DIALOG(R) File 348:EUROPEAN PATENTS  
 (c) 2003 European Patent Office. All rts. reserv.

00218408

Interlace to non-interlace scan converter for RGB format video input signals.

Umwandler von Zeilensprungabtastung in fortlaufende Abtastung fur RGB-Art-Videoeingangssignale.

Convertisseur de balayage entrelace en balayage progressif pour des signaux d'entree video du type RGB.

PATENT ASSIGNEE:

RCA Thomson Licensing Corporation, (944402), 2 Independence Way,  
 Princeton New Jersey 08540, (US), (applicant designated states:  
 AT;DE;FR;GB;IT)

INVENTOR:

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 (US)  
 Fling, Russell Thomas, 7605 Cambridge Drive, Noblesville Indiana 46060,  
 (US)

LEGAL REPRESENTATIVE:

Pratt, Richard Wilson et al (46454), London Patent Operation G.E.  
 Technical Services Co. Inc. Essex House 12/13 Essex Street, London WC2R  
 3AA, (GB)

PATENT (CC, No, Kind, Date): EP 201245 A2 861112 (Basic)  
 EP 201245 A3 881214  
 EP 201245 B1 930616

APPLICATION (CC, No, Date): EP 86303104 860424;  
PRIORITY (CC, No, Date): US 729014 850430  
DESIGNATED STATES: AT; DE; FR; GB; IT  
INTERNATIONAL PATENT CLASS: H04N-009/64 ; H04N-005/44  
CITED PATENTS (EP A): GB 2110900 A; GB 2156180 A; GB 2156180 A; GB 2145603  
A

ABSTRACT EP 201245 A2

A speed-up memory (22,24,26), converts interlaced RGB input signals to double line-rate (progressive scan) form. A vertical detail signal (S3) is derived from the RGB input signals before or after speed-up and a vertical peaking signal (S4) is derived from the detail signal. During the first read operation of the speed-up memory both signals (S3,S4) are added (84,86 with 32,42,52) to the speeded-up signals to effect a preshoot of the resultant signal, and during the second speed-up memory read operation only the peaking signal (S4) is added (32,42,52) to affect an overshoot of the resultant signals whereby alternate lines of the converted RGB signals exhibit enhanced vertical detail.

ABSTRACT WORD COUNT: 112

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 861112 A2 Published application (Alwith Search Report ;A2without Search Report)  
\*Application: 870204 A2 Date and kind of publication of European patent application (change):  
Change: 880608 A2 Representative (change)  
\*Assignee: 880608 A2 Applicant (transfer of rights) (change): RCA LICENSING CORPORATION (944400) 2 Independance Way Princeton New Jersey 08540 (US) (applicant designated states: AT;DE;FR;GB;IT)  
\*Assignee: 880608 A2 Previous applicant in case of transfer of rights (change): RCA CORPORATION (209202) 201 Washington Road Princeton, NJ 08540 (US) (applicant designated states: AT;DE;FR;GB;IT)  
Change: 881207 A2 Obligatory supplementary classification (change)  
Search Report: 881214 A3 Separate publication of the European or International search report  
Examination: 890726 A2 Date of filing of request for examination: 890517  
Examination: 910724 A2 Date of despatch of first examination report: 910606  
Change: 920401 A2 Representative (change)  
Grant: 930616 B1 Granted patent  
Oppn None: 940608 B1 No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	631
CLAIMS B	(German)	EPBBF1	538
CLAIMS B	(French)	EPBBF1	767
SPEC B	(English)	EPBBF1	3796
Total word count - document A			50
Total word count - document B			5732
Total word count - documents A + B			5732

INTERNATIONAL PATENT CLASS: H04N-009/64 ...

... H04N-005/44

...SPECIFICATION RGB signals for inducing preshoot and for combining the peaking signal with intermediate lines of the double line-rate RGB signals for inducing overshoot thereby enhancing vertical transitions of the resultant R'G'B' double line-rate color...

...provided at terminals 28, 38 and 48.

Three elements are involved in this example of the invention for generating the aforementioned vertical detail representative signal. The first is simply a matrix 60 which adds the digitized...

13/5,K/8 (Item 1 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
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00473016 \*\*Image available\*\*

**A CAMERA WITH INTERNAL PRINTING SYSTEM**

**APPAREIL PHOTOGRAPHIQUE A SYSTEME D'IMPRESSION INTERNE**

Patent Applicant/Assignee:

SILVERBROOK RESEARCH PTY LIMITED,  
SILVERBROOK Kia,  
WALMSLEY Simon,  
LAPSTUN Paul,

Inventor(s):

SILVERBROOK Kia,  
WALMSLEY Simon,  
LAPSTUN Paul,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9904368 A1 19990128

Application: WO 98AU544 19980715 (PCT/WO AU9800544)

Priority Application: AU 978003 19970715; AU 978005 19970715; AU 978031  
19970715; AU 977991 19970715; AU 977998 19970715; AU 977988 19970715;  
AU 977993 19970715; AU 978012 19970715; AU 978017 19970715; AU 978014  
19970715; AU 978025 19970715; AU 978032 19970715; AU 977999 19970715;  
AU 978024 19970715; AU 978016 19970715; AU 978030 19970715; AU 977938  
19970715; AU 977997 19970715; AU 977979 19970715; AU 978015 19970715;  
AU 977978 19970715; AU 977982 19970715; AU 977989 19970715; AU 978019  
19970715; AU 977980 19970715; AU 977942 19970715; AU 978018 19970715;  
AU 978021 19970715; AU 978000 19970715; AU 977940 19970715; AU 977939  
19970715; AU 978020 19970715; AU 977985 19970715; AU 977987 19970715;  
AU 978022 19970715; AU 978029 19970715; AU 978023 19970715; AU 978028  
19970715; AU 978027 19970715; AU 978026 19970715; AU 977983 19970715;  
AU 977986 19970715; AU 977981 19970715; AU 977977 19970715; AU 977934  
19970715; AU 977990 19970715; AU 978497 19970811; AU 978505 19970811;  
AU 978498 19970811; AU 978504 19970811; AU 978501 19970811; AU 978500  
19970811; AU 978502 19970811; AU 978499 19970811; AU 979395 19970923;  
AU 979404 19970923; AU 979394 19970923; AU 979396 19970923; AU 979397  
19970923; AU 979398 19970923; AU 979399 19970923; AU 979400 19970923;  
AU 979401 19970923; AU 979402 19970923; AU 979403 19970923; AU 979405  
19970923; AU 97959 19971216; AU 981397 19980119; AU 982370 19980316; AU  
982371 19980316; AU 984094 19980612

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD  
MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US  
UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE  
CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN  
GW ML MR NE SN TD TG

Main International Patent Class: G06T-001/00

International Patent Class: H04N ; H04N-001/21

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 191348

**English Abstract**

A camera system comprising at least one area image sensor for imaging a scene; a camera processor means for processing the image scene in accordance with a predetermined scene transformation requirement; and a printer for printing out the processed image scene on print media, utilizing printing ink stored in a single detachable module inside the camera system; the camera system comprising a portable hand held unit for the imaging of scenes by the area image sensor and printing the scenes directly out of the camera system via the printer.

**French Abstract**

L'invention concerne un systeme d'appareil photographique comprenant au moins un capteur d'image par secteur concu pour mettre une scene en image; un moyen de traitement d'appareil photographique concu pour traiter la scene en image en fonction d'une exigence de transformation de la scene predeterminee; et une imprimante pour imprimer en sortie la scene en image sur des supports d'impression, au moyen d'une encre d'impression stockee dans un seul module amovible situe a l'interieur du systeme d'appareil photographique; ledit systeme comprend une unite portable a main pour l'imagerie de scenes au moyen d'un capteur d'image par secteur et l'impression des scenes directement en sortie du systeme d'appareil photographique a l'aide de l'imprimante.

International Patent Class: H04N ; ...

... H04N-001/21

Fulltext Availability:

Detailed Description

Detailed Description

... vertical strip read/write iterator process.

Fig. 23 illustrates the generate sequential process.

Fig. 24 illustrates the **generate** sequential process.

Fig. 25 illustrates the generate vertical strip process.

Fig. 26 illustrates the generate vertical strip...

13/5,K/9 (Item 2 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00233461

**METHOD AND APPARATUS FOR SECURE TRANSMISSION OF VIDEO SIGNALS**

**PROCEDE ET APPAREIL DE TRANSMISSION SURE DE SIGNAUX VIDEO**

Patent Applicant/Assignee:

BRITISH BROADCASTING CORPORATION,

ROBINSON Adrian Paul,

CLARKE Christopher Keith Perry,

BOWER Andrew John,

Inventor(s):

ROBINSON Adrian Paul,

CLARKE Christopher Keith Perry,

BOWER Andrew John,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9307718 A1 19930415

Application: WO 92GB1786 19920929 (PCT/WO GB9201786)

Priority Application: GB 9120696 19910930; GB 9210750 19920520

Designated States: AT AU BB BG BR CA CH CS DE DK ES FI GB HU JP KP KR LK LU

MG MN MW NL NO PL RO RU SD SE US AT BE CH DE DK ES FR GB GR IE IT LU MC

NL SE BF BJ CF CG CI CM GA GN ML MR SN TD TG

Main International Patent Class: H04N-007/167

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 9001

English Abstract

Video signals are sampled at 4Fsc locked onto sub-carrier phase and frequency. The active picture lines of each field are divided into 6 blocks of 47 lines and the active line periods of those lines scrambled on a block by block basis by line order shuffling. The shuffling algorithm is generated by a line shuffling permutator driven by a PRBS generator (controls 36, 38). Active line period samples for one block are written in unscrambled form into a first memory block (32) and samples

from the previous block are read out in scrambled form from a second memory block (34) for transmission. The complementary process takes place in the decoder.

#### French Abstract

Des signaux video sont echantillonnes a une frequence representant 4 fois la frequence de sous-porteuse (4Fsc), l'echantillonnage etant verrouille sur la frequence et la phase de la sous-porteuse. Les lignes d'exploration d'image actives de chaque champ sont divisees en 6 blocs de 47 lignes et les periodes de lignes actives de ces lignes sont brouillees bloc par bloc par un rearrangement d'ordre de lignes. L'algorithme de rearrangement est genere par un dispositif de permutation de lignes commande par un generateur de sequence binaire pseudo-aleatoire (PRBS) (commandes 36, 38). Des echantillons de periodes de lignes actives pour un bloc sont inscrits sous une forme non brouillee dans un premier bloc de memoire (32), et des echantillons provenant du bloc precedent sont lus sous une forme brouillee a partir d'un second bloc de memoire (34) pour la transmission. Le processus complementaire s'effectue dans le decodeur.

Main International Patent Class: H04N-007/167

Fulltext Availability:

Claims

#### Claim

... of the phase lock loop of Figure 5;

Figure 14a) shows a circuit diagram of a permutation **generator** and pseudo **random** binary **sequence generator** embodying one aspect of the invention;

Figure 14b) shows a circuit diagram of an N-box of...as impairments tend to

increase with the amount of displacement.

The PAL signal is supplied to the **encoder** in **analog** form and is digitised prior to scrambling. Prior line shuffling systems have used sampling rates of twice...the

order of transmission of the lines within each block. The control word for the permutation generator **changes** from block to block according to the output of a pseudo-**random** binary **sequence generator** PRBS. The PRBS is preferably initialised once every TV picture according to a 20 bit seed value...

13/5,K/10 (Item 3 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00233459 \*\*Image available\*\*

**METHOD AND APPARATUS FOR SECURE TRANSMISSION OF VIDEO SIGNALS**

**PROCEDE ET APPAREILLAGE POUR LA TRANSMISSION SURE DE SIGNAUX VIDEO**

Patent Applicant/Assignee:

THOMSON CONSUMER ELECTRONICS S A,  
COCHON Etienne,  
NACCACHE David,  
POIVET Michel,  
DORNER Albert,

Inventor(s):

COCHON Etienne,  
NACCACHE David,  
POIVET Michel,  
DORNER Albert,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9307716 A1 19930415

Application: WO 92EP2255 19920929 (PCT/WO EP9202255)

Priority Application: GB 9120696 19910930; GB 9210750 19920520

Designated States: AT AU BB BG BR CA CH CS DE DK ES FI GB HU JP KP KR LK LU

MG MN MW NL NO PL RO RU SD SE US AT BE CH DE DK ES FR GB GR IE IT LU MC

NL SE BF BJ CF CG CI CM GA GN ML MR SN TD TG

Main International Patent Class: H04N-007/167

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 8736

#### English Abstract

Video signals are sampled at 4Fsc locked onto sub-carrier phase and frequency. The active lines of each field are divided into 6 blocks of 47 lines and the active portions of those lines scrambled on a block by block basis by line shuffling. The shuffling algorithm is generated by a line shuffling permutator driven by a PRBS generator (controls 36, 38). Active line samples for one block are written in unscrambled form into a first memory block (32) and samples from the previous block are read out in scrambled form from a second memory block (34) for transmission. The complementary process takes place in the decoder.

#### French Abstract

Des signaux video sont echantillonnes a une frequence, quadruple de celle de la sous-porteuse, verrouillee sur la phase et la frequence de ladite sous-porteuse. Les lignes actives de chaque champ sont divisees en six blocs de 47 lignes et les parties actives de ces lignes brouillees bloc par bloc par brassage de lignes. L'algorithme de brassage provient d'un permutateur de brassage de lignes pilote par un generateur a sequence binaire pseudo-aleatoire (commandes 36, 38). Des echantillons de ligne active relatifs a un bloc s'inscrivent sous forme non brouillee dans un premier bloc de memoire (32) et des echantillons du bloc precedent sont lus sous forme brouillee a partir d'un second bloc de memoire (34) puis emis. Le processus complementaire intervient dans le decodeur.

Main International Patent Class: H04N-007/167

Fulltext Availability:

Claims

#### Claim

... of the phase lock loop of Figure 5;

Figure 14a) shows a circuit diagram of a permutation **generator** and pseudo **random binary sequence generator** embodying one aspect of the invention;

Figure 14b) shows a circuit diagram of an M-box of...as impairments tend to

increase with the amount of displacement.

The PAL signal is supplied to the **encoder** in **analog** form and is digitised prior to scrambling, Prior line shuffling systems have used sampling rates: of twice...the

order of transmission of the lines within each block, The control word for the permutation generator **changes** from block to block according to the output of a pseudo- **random binary sequence generator** PRBS. The PRBS is preferably initialised once every TV picture according to a 20 bit seed value...

Set	Items	Description
S1	3	ANALOG(3N) (ENCRYPT? OR ENCODE? OR CIPHER? ? OR CYPHER? ? OR CRYPTO? OR (SECURITY OR PUBLIC OR PRIVATE OR MASTER OR PASS)- ( ) (KEY OR KEYS) OR PKI)
S2	29	(RGB OR RED OR GREEN OR BLUE) (2N) (LINE? OR CONNECTION? OR - CIRCUIT OR PATH? OR WIRE OR WIRES)
S3	18410	SWAP? OR SWITCH? OR CHANG? OR FLIP() FLOP OR EXCHANG?
S4	88	(PSEUDORANDOM? OR RANDOM? OR HAPHAZARD? OR UNORDER? OR DIS- ORDER? OR UNORGANI? OR ORDERLESS) (3N) (SEQUENC? OR NUMBER? OR GENERAT?)
S5	0	S1 AND S2
S6	0	S1 AND S4
S7	4	S2 AND S3
S8	0	S7 AND S4
S9	0	S2 AND S4

File 256:SoftBase:Reviews,Companies&Prods. 82-2003/Sep  
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Set	Items	Description
S1	368	ANALOG(3N) (ENCRYPT? OR ENCODE? OR CIPHER? ? OR CYPHER? ? OR CRYPTO? OR (SECURITY OR PUBLIC OR PRIVATE OR MASTER OR PASS)- ( ) (KEY OR KEYS) OR PKI)
S2	4910	(RGB OR RED OR GREEN OR BLUE) (2N) (LINE? OR CONNECTION? OR - CIRCUIT OR PATH? OR WIRE OR WIRES)
S3	3201844	SWAP? OR SWITCH? OR CHANG? OR FLIP() FLOP OR EXCHANG?
S4	37284	(PSEUDORANDOM? OR RANDOM? OR HAPHAZARD? OR UNORDER? OR DIS- ORDER? OR UNORGANI? OR ORDERLESS) (3N) (SEQUENC? OR NUMBER? OR GENERAT?)
S5	0	S1 AND S2
S6	9	S1 AND S4
S7	7	S6 NOT PY>1999
S8	7	S7 NOT PD>19991020
S9	4	RD (unique items)
File	8: Ei	Compendex(R) 1970-2003/Sep W4 (c) 2003 Elsevier Eng. Info. Inc.
File	35: Dissertation	Abs Online 1861-2003/Sep (c) 2003 ProQuest Info&Learning
File	103: Energy	SciTec 1974-2003/Sep B2 (c) 2003 Contains copyrighted material
File	202: Info. Sci. & Tech.	Abs. 1966-2003/Sep 16 (c) 2003 EBSCO Publishing
File	65: Inside	Conferences 1993-2003/Oct W1 (c) 2003 BLDSC all rts. reserv.
File	2: INSPEC	1969-2003/Sep W4 (c) 2003 Institution of Electrical Engineers
File	233: Internet & Personal	Comp. Abs. 1981-2003/Jul (c) 2003, EBSCO Pub.
File	94: JICST-EPlus	1985-2003/Sep W4 (c) 2003 Japan Science and Tech Corp(JST)
File	99: Wilson Appl. Sci & Tech	Abs 1983-2003/Aug (c) 2003 The HW Wilson Co.
File	95: TEME-Technology & Management	1989-2003/Sep W3 (c) 2003 FIZ TECHNIK

6/5/5 (Item 1 from file: 35)  
DIALOG(R)File 35:Dissertation Abs Online  
(c) 2003 ProQuest Info&Learning. All rts. reserv.

01637503 ORDER NO: AAD98-27311

**AN INTEGRATED RANDOM BIT GENERATOR FOR APPLICATIONS IN CRYPTOGRAPHY  
(ANALOG INTEGRATED CIRCUIT)**

Author: PETRIE, CRAIG STEVEN

Degree: PH.D.

Year: 1997

Corporate Source/Institution: GEORGIA INSTITUTE OF TECHNOLOGY (0078)

Adviser: J. ALVIN CONNELLY

Source: VOLUME 59/03-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 1285. 210 PAGES

Descriptors: ENGINEERING, ELECTRONICS AND ELECTRICAL

Descriptor Codes: 0544

The design of a **random bit generator** analog IC suitable for integration with hardware cryptographic systems is presented. Certain applications in cryptography require the production of an unpredictable and unbiased stream of binary data derived from a fundamental noise mechanism. The amplification of noise to produce a random bitstream in the presence of typical non-random IC disturbances presents a challenging analog IC design problem. Background material in hardware **random bit generator** design is presented, including a discussion of **randomness** for **random bit generators** and a literature review of prevalent **random bit generator** methods. New methods to simulate for randomness are developed and an efficient simulation model which tracks the effects of key circuit parameters on the randomness of common and original **random bit generator** implementations is presented. The detailed design of a high performance **random bit generator** system comprised of familiar analog sub-circuits is discussed. A prototype **random bit generator** IC was constructed and tested to be functional for bit rates up to 1.4 MHz. Sequences generated by the experimental system passed many standard randomness tests even when the system was exposed to non-random influences such as power supply noise and substrate signal coupling. The system occupied a total chip area of 1.5 mm<sup>2</sup> in a 2- $\mu$ m CMOS technology and dissipated 3.9 mW of power.

6/5/6 (Item 1 from file: 2)  
DIALOG(R)File 2:INSPEC  
(c) 2003 Institution of Electrical Engineers. All rts. reserv.

7509084 INSPEC Abstract Number: B2003-02-6120D-046, C2003-02-1260C-032

**Title: Cryptography by pseudo random number generator**

Author(s): Borujeni, S.E.

Author Affiliation: Dept. of Comput. Eng., Univ. of Isfahan, Iran

Conference Title: 2002 First International IEEE Symposium 'Intelligent Systems' Proceedings (Cat. No.02EX499) Part vol.1 p.244-7 vol.1

Publisher: IEEE, Piscataway, NJ, USA

Publication Date: 2002 Country of Publication: USA 3 vol.(387+54+84) pp.

ISBN: 0 7803 7134 8 Material Identity Number: XX-2002-02292

U.S. Copyright Clearance Center Code: 0-7803-7134-8/02/\$10.00

Conference Title: IS'02: First International IEEE Symposium 'Intelligent Systems'

Conference Sponsor: IEEE Control Syst. Soc.; IEEE Instrum. & Meas. Soc.; IEEE Region 8; Knowledge Eng. & Discovery Res. Inst. - Auckland Univ. Technol.; IEEE IM/CS/SMC Joint Chapter of Bulgaria; IEEE Sect. Bulgaria; ICT Dev. Agency

Conference Date: 10-12 Sept. 2002 Conference Location: Varna, Bulgaria

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P); Experimental (X)

Abstract: This paper describes an **encryption** system for **analog** signals based on permutation of samples. The scrambling algorithm is based on the permutation of the samples and provides highly secured scrambled signal by permuting a large number of those samples. The algorithm for

generation the permutation matrices is explained. Important items to be considered in designing the system are discussed such as choice and construction of permutation matrices, and configuration of the practical scrambling system. C programming language was used for simulation. The results of simulation and tests shows that proposed scrambling achieve extremely high-level security. The method of choice and generation of permutation matrices, Tompkin-Paig algorithm and maximum length shift register are discussed. Simulations of different parts of the system, include scrambler, descrambler and generation of permutation matrices programs are provided. Miscellaneous methods of objective tests are described. Theoretical and simulation results of these tests are also provided. (9 Refs)

Subfile: B C

Descriptors: cryptography; **random number generation**

Identifiers: encryption system; analog signals; scrambling algorithm; permutation matrices; C programming language; high-level security; Tompkin-Paig algorithm; maximum length shift register; objective tests; **pseudo random number generator**

Class Codes: B6120D (Cryptography); C1260C (Cryptography theory); C6130S (Data security); C5230 (Digital arithmetic methods)

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9/5/1 (Item 1 from file: 8)  
DIALOG(R)File 8:Ei Compendex(R)  
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05294024 E.I. No: EIP99064692178

**Title: Delta-sigma cellular automata for analog VLSI random vector generation**

Author: Cauwenberghs, Gert

Corporate Source: Johns Hopkins Univ, Baltimore, MD, USA

Conference Title: Proceedings of the 1998 International Symposium on Physical Design, ISPD-98

Conference Location: Monterey, CA, USA Conference Date: 19980406-19980408

E.I. Conference No.: 55019

Source: IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems v 18 n 4 1999. p 240-250

Publication Year: 1999

CODEN: ITCSDI ISSN: 0278-0070

Language: English

Document Type: JA; (Journal Article) Treatment: T; (Theoretical)

Journal Announcement: 9907W4

Abstract: We present a class of analog cellular automata for parallel analog **random vector generation**, including theory on the randomness properties, scalable parallel very large scale integration (VLSI) architectures, and experimental results from an analog VLSI prototype with 64 channels. Linear congruential coupling between cells produces parallel channels of uniformly distributed random analog values, with statistics that are uncorrelated both across channels and over time. The cell for each random channel essentially implements a switched-capacitor delta-sigma modulator, and measures 100  $\mu\text{m}$  multiplied by 120  $\mu\text{m}$  in 2  $\mu\text{m}$  CMOS technology. The 64 cells are connected as a MASH cascade in a chain or ring topology on a two-dimensional (2-D) grid, and can be rearranged for use in various VLSI applications that require a parallel supply of random analog vectors, such as **analog encryption** and secure communications, **analog** built-in self-test, stochastic neural networks, and simulated annealing optimization and learning. (Author abstract) 43 Refs.

Descriptors: \*Automata theory; VLSI circuits; Linear integrated circuits; Vectors; Random processes; Capacitors; Modulators; CMOS integrated circuits; Electric network topology; Security of data

Identifiers: **Random vector generation**; Analog cellular automata; Delta sigma modulator; Ring topology

Classification Codes:

721.1 (Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory); 714.2 (Semiconductor Devices & Integrated Circuits); 921.1 (Algebra); 922.1 (Probability Theory); 704.1 (Electric Components); 713.3 (Modulators, Demodulators, Limiters, Discriminators, Mixers)

721 (Computer Circuits & Logic Elements); 714 (Electronic Components); 921 (Applied Mathematics); 922 (Statistical Methods); 704 (Electric Components & Equipment); 713 (Electronic Circuits)

72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS); 92 (ENGINEERING MATHEMATICS); 70 (ELECTRICAL ENGINEERING)

9/5/2 (Item 2 from file: 8)  
DIALOG(R)File 8:Ei Compendex(R)  
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05119860 E.I. No: EIP98094381573

**Title: VLSI delta-sigma cellular neural network for analog random vector generation**

Author: Cauwenberghs, Gert

Corporate Source: Johns Hopkins Univ, Baltimore, MD, USA

Conference Title: Proceedings of the 1998 IEEE International Symposium on Circuits and Systems, ISCAS. Part 3 (of 6)

Conference Location: Monterey, CA, USA Conference Date: 19980531-19980603

Sponsor: IEEE  
E.I. Conference No.: 48950  
Source: Proceedings - IEEE International Symposium on Circuits and Systems v 3 1998. IEEE, Piscataway, NJ, USA, 98CH36187. p 147-150  
Publication Year: 1998  
CODEN: PICSDI ISSN: 0271-4310  
Language: English  
Document Type: CA; (Conference Article) Treatment: T; (Theoretical)  
Journal Announcement: 9811W2

Abstract: We present a cellular neural network architecture for parallel analog **random vector generation**, including experimental results from an analog VLSI prototype with 64 channels. Nearest-neighbor coupling between cells produces parallel channels of uniformly distributed random analog values, with statistics that are truly uncorrelated across channels and over time. The cell for each random channel emulates an integrating nonlinearity essentially implementing a delta-sigma modulator, and measures  $100 \mu m$  multiplied by  $120 \mu m$  in  $2 \mu m$  CMOS technology. Applications include **analog encryption** and secure communications, **analog** built-in self-test, stochastic neural networks, and simulated annealing optimization and learning. (Author abstract) 23 Refs.

Descriptors: \*Cellular neural networks; VLSI circuits; Linear integrated circuits; CMOS integrated circuits; Random processes; Delta modulation

Identifiers: Analog **random vector generation**

Classification Codes:

723.4 (Artificial Intelligence); 714.2 (Semiconductor Devices & Integrated Circuits); 922.1 (Probability Theory)  
723 (Computer Software); 714 (Electronic Components); 922 (Statistical Methods)  
72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS); 92 (ENGINEERING MATHEMATICS)

9/5/3 (Item 3 from file: 8)  
DIALOG(R) File 8: Ei Compendex(R)  
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05058400 E.I. No: EIP98074272137

Title: VLSI cellular array of coupled delta-sigma modulators for random analog vector generation

Author: Cauwenberghs, Gert

Corporate Source: Johns Hopkins Univ, Baltimore, MD, USA

Conference Title: Proceedings of the 1997 31st Asilomar Conference on Signals, Systems & Computers. Part 2 (of 2)

Conference Location: Pacific Grove, CA, USA Conference Date: 19971102-19971105

Sponsor: EIOA

E.I. Conference No.: 48631

Source: Conference Record of the Asilomar Conference on Signals, Systems & Computers v 2 1998. IEEE Comp Soc, Los Alamitos, CA, USA, 97CB36163. p 1151-1155

Publication Year: 1998

CODEN: CCSCE2 ISSN: 1058-6393

Language: English

Document Type: CA; (Conference Article) Treatment: T; (Theoretical)

Journal Announcement: 9809W1

Abstract: Parallel VLSI **generation** of **random** analog vectors with controlled statistics from deterministic chaos is the key to applications such as **analog encryption** and secure communications, **analog** built-in self-test, stochastic neural networks, and simulated annealing optimization as well as perturbation learning in neural hardware. We present a class of analog additive cellular automata which generate parallel streams of statistically independent, uniformly distributed random analog values. The underlying noise-shaping mechanism is essentially that of a MASH cascade of delta-sigma modulators. We present theory on the noise-shaping properties, scalable parallel VLSI architectures, and include experimental results from an analog VLSI prototype with 65 channels. The cell for each channel implements a switched-capacitor delta-sigma modulator, and measures  $100 \mu m$

m multiplied by 120  $\mu\text{m}$  in 2  $\mu\text{m}$  CMOS technology. The 65 cells are connected in a chain on a 2-D grid, and can be rearranged for use in various VLSI applications that require a parallel supply of random analog vectors. (Author abstract) 24 Refs.

Descriptors: \*Cellular arrays; Modulators; VLSI circuits; CMOS integrated circuits; Integrated circuit layout; Parallel processing systems; Communication channels (information theory); Cellular neural networks; Spurious signal noise; Random processes

Identifiers: Delta sigma modulators; **Random analog vector generation**; Cellular automata

Classification Codes:

722.1 (Data Storage, Equipment & Techniques); 713.3 (Modulators, Demodulators, Limiters, Discriminators, Mixers); 714.2 (Semiconductor Devices & Integrated Circuits); 722.4 (Digital Computers & Systems); 716.1 (Information & Communication Theory); 723.4 (Artificial Intelligence)

722 (Computer Hardware); 713 (Electronic Circuits); 714 (Electronic Components); 716 (Radar, Radio & TV Electronic Equipment); 723 (Computer Software)

72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS)

9/5/4 (Item 1 from file: 35)

DIALOG(R) File 35:Dissertation Abs Online

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01637503 ORDER NO: AAD98-27311

**AN INTEGRATED RANDOM BIT GENERATOR FOR APPLICATIONS IN CRYPTOGRAPHY**  
(ANALOG INTEGRATED CIRCUIT)

Author: PETRIE, CRAIG STEVEN

Degree: PH.D.

Year: 1997

Corporate Source/Institution: GEORGIA INSTITUTE OF TECHNOLOGY (0078)

Adviser: J. ALVIN CONNELLY

Source: VOLUME 59/03-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 1285. 210 PAGES

Descriptors: ENGINEERING, ELECTRONICS AND ELECTRICAL

Descriptor Codes: 0544

The design of a **random bit generator** analog IC suitable for integration with hardware cryptographic systems is presented. Certain applications in cryptography require the production of an unpredictable and unbiased stream of binary data derived from a fundamental noise mechanism. The amplification of noise to produce a random bitstream in the presence of typical non-random IC disturbances presents a challenging analog IC design problem. Background material in hardware **random bit generator** design is presented, including a discussion of **randomness** for **random bit generators** and a literature review of prevalent **random bit generator** methods. New methods to simulate for randomness are developed and an efficient simulation model which tracks the effects of key circuit parameters on the randomness of common and original **random bit generator** implementations is presented. The detailed design of a high performance **random bit generator** system comprised of familiar analog sub-circuits is discussed. A prototype **random bit generator** IC was constructed and tested to be functional for bit rates up to 1.4 MHz. Sequences generated by the experimental system passed many standard randomness tests even when the system was exposed to non-random influences such as power supply noise and substrate signal coupling. The system occupied a total chip area of 1.5 mm<sup>2</sup> in a 2- $\mu\text{m}$  CMOS technology and dissipated 3.9 mW of power.

Set	Items	Description
S1	971	ANALOG(3N) (ENCRYPT? OR ENCODE? OR CIPHER? ? OR CYPHER? ? OR CRYPTO? OR (SECURITY OR PUBLIC OR PRIVATE OR MASTER OR PASS) - ( ) (KEY OR KEYS) OR PKI)
S2	30960	(RGB OR RED OR GREEN OR BLUE) (2N) (LINE? OR CONNECTION? OR - CIRCUIT OR PATH? OR WIRE OR WIRES)
S3	8278148	SWAP? OR SWITCH? OR CHANG? OR FLIP() FLOP OR EXCHANG?
S4	22677	(PSEUDORANDOM? OR RANDOM? OR HAPHAZARD? OR UNORDER? OR DIS- ORDER? OR UNORGANI? OR ORDERLESS) (3N) (SEQUENC? OR NUMBER? OR GENERAT?)
S5	0	S1 (S) S2
S6	2	S1 (S) S4
S7	2162	S2 (S) S3
S8	2	S7 (S) S4
S9	4	S6 OR S8
S10	4	S9 NOT PY>1999
File	15:ABI/Inform(R)	1971-2003/Oct 07 (c) 2003 ProQuest Info&Learning
File	810:Business Wire	1986-1999/Feb 28 (c) 1999 Business Wire
File	647:CMF Computer Fulltext	1988-2003/Sep W2 (c) 2003 CMP Media, LLC
File	275:Gale Group Computer DB(TM)	1983-2003/Oct 07 (c) 2003 The Gale Group
File	674:Computer News Fulltext	1989-2003/Sep W4 (c) 2003 IDG Communications
File	696:DIALOG Telecom. Newsletters	1995-2003/Oct 07 (c) 2003 The Dialog Corp.
File	583:Gale Group Globalbase(TM)	1986-2002/Dec 13 (c) 2002 The Gale Group
File	47:Gale Group Magazine DB(TM)	1959-2003/Oct 07 (c) 2003 The Gale group
File	624:McGraw-Hill Publications	1985-2003/Oct 07 (c) 2003 McGraw-Hill Co. Inc
File	636:Gale Group Newsletter DB(TM)	1987-2003/Oct 07 (c) 2003 The Gale Group
File	484:Periodical Abs Plustext	1986-2003/Sep W4 (c) 2003 ProQuest
File	813:PR Newswire	1987-1999/Apr 30 (c) 1999 PR Newswire Association Inc
File	613:PR Newswire	1999-2003/Oct 08 (c) 2003 PR Newswire Association Inc
File	16:Gale Group PROMT(R)	1990-2003/Oct 06 (c) 2003 The Gale Group
File	160:Gale Group PROMT(R)	1972-1989 (c) 1999 The Gale Group
File	141:Readers Guide	1983-2003/Aug (c) 2003 The HW Wilson Co
File	553:Wilson Bus. Abs. FullText	1982-2003/Aug (c) 2003 The HW Wilson Co

10/5,K/1 (Item 1 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
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00657358 93-06579

\*\*USE FORMAT 9 FOR FULL TEXT\*\*

**The Wages of Fear: Marketing Cellular Encryption**

Sweeney, Dan

Cellular Business v9n13 PP: 58-66 Dec 1992 ISSN: 0741-6520 JRNL CODE:

CLB

DOC TYPE: Journal article LANGUAGE: English LENGTH: 6 Pages

WORD COUNT: 3063

ABSTRACT: Both digital and analog encryption systems are available for cellular users, with analog enjoying an edge in market penetration. Analog systems are relatively low priced and provide a lesser degree of security. Digital systems are more expensive and are targeted at users with vital security needs. In addition to offering higher levels of security, digital encryption lends itself to data and fax transmissions, while analog encryption is confined to voice. The digital and analog wings of the encryption industry have approached the market in different ways. Digital systems producers Cylink and Motorola have long histories of selling encryption to federal agencies, and they diversified their product offerings when these agencies began to use the cellular network. Analog systems producers Cycomm and Transcript International were never able to sell to the upper echelons of federal service. They have approached carriers and have attempted to sell encryption as a service as much as a product.

COMPANY NAMES:

Cylink Corp (DUNS:12-136-6280)

Motorola Inc (DUNS:00-132-5463 TICKER:MOT)

Cycomm (DUNS:13-108-2810)

Transcript International

Midian Electronics Inc (DUNS:09-451-7745)

GEOGRAPHIC NAMES: US

DESCRIPTORS: Security systems; Data encryption; Cellular telephones;

Digital; Analog; Market strategy; Many companies

CLASSIFICATION CODES: 5140 (CN=Security); 5250 (CN=Telecommunications systems); 7000 (CN=Marketing); 9190 (CN=United States)

...TEXT: will still exhibit sufficient regularity allowing the mode of processing to be easily detected and then reversed. **Analog encryption** for cellular goes one better by continually varying the split frequency at which the two bands are...

... primitive form of spread spectrum transmission. Changes in the break frequency are controlled by a digital code key **generating** a pseudo-random number sequence, which is highly resistant to identification.

The power of such analog systems can be increased in two...

10/5,K/2 (Item 1 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

(c) 2003 The Gale Group. All rts. reserv.

01958890 SUPPLIER NUMBER: 18500621 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Bumper crop of special effects. (Technology Information) (Brief Article)**

Safreed, Sean J.

MacUser, v12, n9, p91(1)

Sep, 1996

DOCUMENT TYPE: Brief Article ISSN: 0884-0997 LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 655 LINE COUNT: 00051

DESCRIPTORS: Technology Application; Desktop Publishing Technology; Image



Processing Software  
FILE SEGMENT: CD File 275

... you see when you look through some real camera lenses. Applying After Effects' Glow effect to the **green lines** and arrows made them stand out, and using the **Numbers** effect, a **random - number generator**, made it possible to put a column of **changing** numbers down the right side of the frame to simulate the effect of the camera calculating its...

10/5,K/3 (Item 1 from file: 47)  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2003 The Gale group. All rts. reserv.

04544269 SUPPLIER NUMBER: 18500621 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Bumper crop of special effects. (Technology Information) (Brief Article)**  
Safreed, Sean J.  
MacUser, v12, n9, p91(1)  
Sep, 1996  
DOCUMENT TYPE: Brief Article ISSN: 0884-0997 LANGUAGE: English  
RECORD TYPE: Fulltext  
WORD COUNT: 655 LINE COUNT: 00051

DESCRIPTORS: Desktop publishing--Usage; Image processing--Usage  
FILE SEGMENT: CD File 275

... you see when you look through some real camera lenses. Applying After Effects' Glow effect to the **green lines** and arrows made them stand out, and using the **Numbers** effect, a **random - number generator**, made it possible to put a column of **changing** numbers down the right side of the frame to simulate the effect of the camera calculating its...

10/5,K/4 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2003 The Gale Group. All rts. reserv.

06136669 Supplier Number: 53892806 (USE FORMAT 7 FOR FULLTEXT)  
**By leveraging the compute-intensive architecture of its 40-MIPS DSP.**  
Electronic Design, v47, n3, p88(1)  
Feb 8, 1999  
ISSN: 0013-4872  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 329  
PUBLISHER NAME: Penton Publishing, Inc.  
COMPANY NAMES: \*Analog Devices Inc.  
EVENT NAMES: \*336 (Product introduction)  
GEOGRAPHIC NAMES: \*1USA (United States)  
PRODUCT NAMES: \*3573000 (Computers & Peripherals)  
INDUSTRY NAMES: BUSN (Any type of business); CMPT (Computers and Office Automation); ELEC (Electronics)  
NAICS CODES: 334111 (Electronic Computer Manufacturing)  
TICKER SYMBOLS: ADI  
SPECIAL FEATURES: LOB; COMPANY

(USE FORMAT 7 FOR FULLTEXT)  
TEXT:  
By leveraging the compute-intensive architecture of its 40-MIPS DSP and some dedicated **crypto**-processor logic, **Analog** Devices Inc., Norwood, Mass., in conjunction with Information Resource Engineering, Baltimore, Md., has developed the first high...

...is to be used in virtual private networks without significantly degrading the data transfer rate. A **random - number generator**, a public-key accelerator, and a key-management block (256-bits of laser-programmable, tamper-proof, configuration...

Set	Items	Description
S1	20	ANALOG() ENCRYPTION
S2	18	S1 NOT PY>1999
S3	18	S2 NOT PD>19991020
S4	12	RD (unique items)
File	2:INSPEC 1969-2003/Sep W4	(c) 2003 Institution of Electrical Engineers
File	8:EI Compendex(R) 1970-2003/Sep W4	(c) 2003 Elsevier Eng. Info. Inc.
File	34:SciSearch(R) Cited Ref Sci 1990-2003/Sep W4	(c) 2003 Inst for Sci Info
File	94:JICST-EPlus 1985-2003/Sep W4	(c) 2003 Japan Science and Tech Corp (JST)
File	144:Pascal 1973-2003/Sep W4	(c) 2003 INIST/CNRS
File	239:Mathsci 1940-2003/Nov	(c) 2003 American Mathematical Society
File	696:DIALOG Telecom. Newsletters 1995-2003/Oct 07	(c) 2003 The Dialog Corp.

4/5,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

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6224524 INSPEC Abstract Number: B1999-05-1205-012, C1999-05-7410D-124

**Title: Delta-sigma cellular automata for analog VLSI random vector generation**

Author(s): Cauwenberghs, G.

Author Affiliation: Dept. of Electr. & Comput. Eng., Johns Hopkins Univ., Baltimore, MD, USA

Journal: IEEE Transactions on Circuits and Systems II: Analog and Digital Signal Processing vol.46, no.3 p.240-50

Publisher: IEEE,

Publication Date: March 1999 Country of Publication: USA

CODEN: ICSPE5 ISSN: 1057-7130

SICI: 1057-7130(199903)46:3L:240:DSCA;1-A

Material Identity Number: 0941-1999-004

U.S. Copyright Clearance Center Code: 1057-7130/99/\$10.00

Document Number: S1057-7130(99)01775-9

Language: English Document Type: Journal Paper (JP)

Treatment: Applications (A); Practical (P); Theoretical (T); Experimental (X)

**Abstract:** We present a class of analog cellular automata for parallel analog random vector generation, including theory on the randomness properties, scalable parallel very large scale integration (VLSI) architectures, and experimental results from an analog VLSI prototype with 64 channels. Linear congruential coupling between cells produces parallel channels of uniformly distributed random analog values, with statistics that are uncorrelated both across channels and over time. The cell for each random channel essentially implements a switched-capacitor delta-sigma modulator, and measures 100  $\mu\text{m}$   $\times$  120  $\mu\text{m}$  in 2  $\mu\text{m}$  CMOS technology. The 64 cells are connected as a MASH cascade in a chain or ring topology on a two-dimensional (2-D) grid, and can be rearranged for use in various VLSI applications that require a parallel supply of random analog vectors, such as **analog encryption** and secure communications, analog built in self-test, stochastic neural networks, and simulated annealing optimization and learning. (43 Refs)

Subfile: B C

**Descriptors:** analogue integrated circuits; built-in self test; cellular automata; delta-sigma modulation; simulated annealing; switched capacitor networks

**Identifiers:** delta-sigma cellular automata; analog VLSI; random vector generation; scalable parallel very large scale integration; linear congruential coupling; uniformly distributed random analog values; switched-capacitor delta-sigma modulator; MASH cascade; 2D grid; **analog encryption**; analog built in self-test; stochastic neural networks; simulated annealing optimization; 2 micron

**Class Codes:** B1205 (Analogue circuit design, modelling and testing); B0260 (Optimisation techniques); B7210A (Automatic test systems); B2570A (Semiconductor integrated circuit design, layout, modelling and testing); C7410D (Electronic engineering computing); C4220 (Automata theory); C1180 (Optimisation techniques)

Numerical Indexing: size 2.0E-06 m

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...**Abstract:** for use in various VLSI applications that require a parallel supply of random analog vectors, such as **analog encryption** and secure communications, analog built in self-test, stochastic neural networks, and simulated annealing optimization and learning.

...**Identifiers:** **analog encryption** ;

4/5,K/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

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6033309 INSPEC Abstract Number: B9811-1295-010, C9811-5190-007

**Title: VLSI cellular array of coupled delta-sigma modulators for random analog vector generation**

Author(s): Cauwenberghs, G.

Author Affiliation: Dept. of Electr. & Comput. Eng., Johns Hopkins Univ., Baltimore, MD, USA

Conference Title: Conference Record of the Thirty-First Asilomar Conference on Signals, Systems and Computers (Cat. No.97CB36136) Part vol.2 p.1151-5 vol.2

Editor(s): Fargues, M.P.; Hippenstiel, R.D.

Publisher: IEEE Comput. Soc, Los Alamitos, CA, USA

Publication Date: 1998 Country of Publication: USA 2 vol. xxiii+1749 pp.

ISBN: 0 8186 8316 3 Material Identity Number: XX98-01298

U.S. Copyright Clearance Center Code: 1058-6393/98/\$10.00

Conference Title: Conference Record of the Thirty-First Asilomar Conference on Signals, Systems and Computers (Cat. No.97CB36163)

Conference Sponsor: Naval Postgraduate School, Monterey; San Jose State Univ.; IEEE Signal Process. Soc

Conference Date: 2-5 Nov. 1997 Conference Location: Pacific Grove, CA, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P); Theoretical (T)

Abstract: Parallel VLSI generation of random analog vectors with controlled statistics from deterministic chaos is the key to applications such as **analog encryption** and secure communications, analog built-in self-test, stochastic neural networks, and simulated annealing optimization as well as perturbation learning in neural hardware. We present a class of analog additive cellular automata which generate parallel streams of statistically independent, uniformly distributed random analog values. The underlying noise-shaping mechanism is essentially that of a MASH cascade of delta-sigma modulators. We present theory on the noise-shaping properties, scalable parallel VLSI architectures, and include experimental results from an analog VLSI prototype with 65 channels. The cell for each channel implements a switched-capacitor delta-sigma modulator, and measures 100  $\mu\text{m}$   $\times$  120  $\mu\text{m}$  in 2  $\mu\text{m}$  CMOS technology. The 65 cells are connected in a chain on a 2-D grid, and can be rearranged for use in various VLSI applications that require a parallel supply of random analog vectors. (24 Refs)

Subfile: B C

Descriptors: cascade networks; cellular arrays; cellular automata; cellular neural nets; CMOS analogue integrated circuits; neural chips; parallel architectures; sigma-delta modulation; switched capacitor networks; vectors; VLSI

Identifiers: VLSI cellular array; coupled delta-sigma modulators; random analog vector generation; parallel VLSI generation; controlled statistics; deterministic chaos; **analog encryption**; secure communications; analog built-in self-test; stochastic neural networks; simulated annealing optimization; perturbation learning; analog additive cellular automata; uniformly distributed random analog values; noise-shaping mechanism; MASH cascade; scalable parallel VLSI architectures; switched-capacitor delta-sigma modulator; CMOS technology; 2-D grid; 2 micron

Class Codes: B1295 (Neural nets (circuit implementations)); B2570D (CMOS integrated circuits); C5190 (Neural net devices); C5220P (Parallel architecture)

Numerical Indexing: size 2.0E-06 m

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...Abstract: of random analog vectors with controlled statistics from deterministic chaos is the key to applications such as **analog encryption** and secure communications, analog built-in self-test, stochastic neural networks, and simulated annealing optimization as well...

...Identifiers: **analog encryption** ;

4/5,K/3 (Item 3 from file: 2)

DIALOG(R) File 2:INSPEC

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6011134 INSPEC Abstract Number: B9810-1295-026, C9810-5190-025

**Title: VLSI delta-sigma cellular neural network for analog random vector generation**

Author(s): Cauwenberghs, G.

Author Affiliation: Dept. of Electr. & Comput. Eng., Johns Hopkins Univ., Baltimore, MD, USA

Conference Title: ISCAS '98. Proceedings of the 1998 IEEE International Symposium on Circuits and Systems (Cat. No.98CH36187) Part vol.3 p. 147-50 vol.3

Publisher: IEEE, New York, NY, USA

Publication Date: 1998 Country of Publication: USA 6 vol. (xlv+603+489+674+615+557+656) pp.

ISBN: 0 7803 4455 3 Material Identity Number: XX98-01936

U.S. Copyright Clearance Center Code: 0 7803 4455 3/98/\$10.00

Conference Title: ISCAS '98 Proceedings of the 1998 IEEE International Symposium on Circuits and Systems

Conference Date: 31 May-3 June 1998 Conference Location: Monterey, CA, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Applications (A); Practical (P); Experimental (X)

Abstract: We present a cellular neural network architecture for parallel analog random vector generation, including experimental results from an analog VLSI prototype with 64 channels. Nearest-neighbor coupling between cells produces parallel channels of uniformly distributed random analog values, with statistics that are truly uncorrelated across channels and over time. The cell for each random channel emulates an integrating nonlinearity essentially implementing a delta-sigma modulator, and measures  $100\text{ }\mu\text{m} \times 120\text{ }\mu\text{m}$  in  $2\text{ }\mu\text{m}$  CMOS technology. Applications include **analog encryption** and secure communications, analog built-in self-test, stochastic neural networks, and simulated annealing optimization and learning. (23 Refs)

Subfile: B C

Descriptors: analogue processing circuits; built-in self test; cellular neural nets; CMOS analogue integrated circuits; neural chips; VLSI

Identifiers: VLSI; delta-sigma cellular neural network; analog random vector generation; nearest-neighbor coupling; parallel channels; integrating nonlinearity; **analog encryption**; secure communications; built-in self-test; stochastic neural networks; simulated annealing optimization; CMOS technology; 2 micron

Class Codes: B1295 (Neural nets (circuit implementations)); B1285 (Analogue processing circuits); B2570D (CMOS integrated circuits); C5190 (Neural net devices); C5160 (Analogue circuits)

Numerical Indexing: size  $2.0\text{E}-06\text{ m}$

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...Abstract: modulator, and measures  $100\text{ }\mu\text{m} \times 120\text{ }\mu\text{m}$  in  $2\text{ }\mu\text{m}$  CMOS technology. Applications include **analog encryption** and secure communications, analog built-in self-test, stochastic neural networks, and simulated annealing optimization and learning.

...Identifiers: **analog encryption** ;

4/5,K/4 (Item 4 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

02324354 INSPEC Abstract Number: B84053453

**Title: Perfect secrecy encryption of analog signals**

Author(s): Gersho, A.

Author Affiliation: Dept. of Electrical & Computer Engng., Univ. of California, Santa Barbara, CA, USA

Journal: IEEE Journal on Selected Areas in Communications vol.SAC-2, no.3 p.460-6

Publication Date: May 1984 Country of Publication: USA

CODEN: ISACEM ISSN: 0733-8716

U.S. Copyright Clearance Center Code: 0733-8716/84/0500-0460\$01.00

Language: English Document Type: Journal Paper (JP)

Treatment: Theoretical (T)

Abstract: The author formulates a general model for **analog encryption** and explores some of its implications. Specifically, he considers the idealized case of perfect secrecy where cryptanalysis can yield no information whatsoever about the transmitted message. It is shown that for perfect secrecy and a fixed key size, **analog encryption** is not fundamentally better than encryption via digitization. (12 Refs)

Subfile: B

Descriptors: cryptography; speech analysis and processing

Identifiers: analog signals encryption; speech encryption; digital encryption; optimisation; model

Class Codes: B6130 (Speech analysis and processing techniques)

Abstract: The author formulates a general model for **analog encryption** and explores some of its implications. Specifically, he considers the idealized case of perfect secrecy where cryptanalysis...

... whatsoever about the transmitted message. It is shown that for perfect secrecy and a fixed key size, **analog encryption** is not fundamentally better than encryption via digitization.

4/5,K/5 (Item 5 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

02257681 INSPEC Abstract Number: B84032246

**Title: How many people listened to your call?**

Author(s): Booth, G.

Author Affiliation: Controlonics Corp., Westford, MA, USA

Journal: Industrial Research/Development vol.26, no.1 p.92-4

Publication Date: Jan. 1984 Country of Publication: USA

CODEN: IRDEDZ ISSN: 0160-4074

Language: English Document Type: Journal Paper (JP)

Treatment: General, Review (G)

Abstract: Achieving adequate security does not always require the most-sophisticated telephone scrambling device. As people become more aware of the need to protect information, we are hearing more and more about digital data encryption and are becoming increasingly familiar with the jargon and buzzwords used in the data security world. What frequently is forgotten, however, is that as much confidential information is transmitted by telephone as by computer. Despite its reputation as the latest and best method, digital voice encryption really is only for those organizations under heavy attack and/or with a generous budget. Analog techniques may not have the glamour of digital, but for the majority of users they get the job done at a cost that is easier to justify. (0 Refs)

Subfile: B

Descriptors: cryptography; telephony

Identifiers: **analog encryption** ; security; telephone scrambling device ; digital voice encryption

Class Codes: B6120B (Codes); B6210D (Telephony)

Identifiers: **analog encryption** ;

4/5,K/6 (Item 6 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

01437255 INSPEC Abstract Number: B80001491

**Title: A technique for analog voice encryption**

Author(s): Wyner, A.D.

Author Affiliation: Bell Labs., Murray Hill, NY, USA

Conference Title: ICC '79. 1979 International Conference on Communications Part I p.04-7/1

Publisher: IEEE, New York, NY, USA

Publication Date: 1979 Country of Publication: USA 422 pp.

Conference Sponsor: IEEE

Conference Date: 10-14 June 1979 Conference Location: Boston, MA, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: The author outlines a new, basically **analog , encryption** technique, which promises high security and very little degradation of quality.

Subfile: B

Descriptors: encoding; signal processing; voice communication

Identifiers: analog voice encryption; data security; encoding

Class Codes: B6120B (Codes)

Abstract: The author outlines a new, basically **analog , encryption** technique, which promises high security and very little degradation of quality.

4/5,K/7 (Item 1 from file: 8)

DIALOG(R) File 8: Ei Compendex(R)

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01899117 E.I. Monthly No: EIM8510-061915

Title: **NEW VOICE-BAND ENCRYPTION METHOD USING A CONSTANT ENVELOPE SCRAMBLER.**

Author: Hasui, Kouya; Yatsuboshi, Reigo; Akiyama, Ryota; Mochizuki, Michimasa

Corporate Source: Fujitsu Lab Ltd, Jpn

Conference Title: Conference on Telecommunications, Radio and Information Technology.

Conference Location: Birmingham, Engl Conference Date: 19840516

Sponsor: IEE, Electronics Div, London, Engl; British Computer Soc, London, Engl; IEEE, United Kingdom & Republic of Ireland Section; Inst of Mathematics & Its Applications, Southend-on-Sea, Engl; Inst of Physics, London, Engl; IERE, London, Engl

E.I. Conference No.: 05489

Source: IEE Conference Publication n 235. Publ by IEE, London, Engl and New York, NY, USA p 142-146

Publication Year: 1984

CODEN: IECPB4 ISBN: 0-85296292-4

Language: English

Document Type: PA; (Conference Paper)

Journal Announcement: 8510

Abstract: **Analog encryption** is employed to insure communications security via communication paths having limited frequency bandwidth (**analog encryption** is called analog scrambling). Time domain and amplitude and frequency domain technique are used for analog scrambler implementation. Frequency Domain Scramblers have become widespread due to the smaller frequency bandwidth constraints and signal delay times. A Frequency Domain Scrambler divides the entire frequency bandwidth of a voice signal into several bands using analog bands-split filters, and then interchanges the order of the split bands based on a key data algorithm. It then synthesizes the secure voice signal. A method is proposed that is based on Data Encryption Standard (DES) and division of the signal bandwidth using Fast Fourier Transform (FFT). The validity of the methods (termed Constant Envelope Scrambler) is described using the result of hearing tests based on computer simulation and, finally design parameters for this method are given. 5 refs.

Descriptors: \*SPEECH--\*Processing; DATA PROCESSING--Security of Data; DIGITAL COMMUNICATION SYSTEMS; COMPUTER SIMULATION; MATHEMATICAL TRANSFORMATIONS--Fast Fourier Transforms; CRYPTOGRAPHY

Identifiers: **ANALOG ENCRYPTION** ; SCRAMBLING; LIMITED FREQUENCY BANDWIDTH; CONSTANT ENVELOPE SCRAMBLER; COMMUNICATION SECURITY; DATA ENCRYPTION STANDARD (DES)

Classification Codes:

751 (Acoustics); 723 (Computer Software); 718 (Telephone & Line Communications); 716 (Radar, Radio & TV Electronic Equipment); 921 (Applied Mathematics); 902 (Engineering Graphics & Standards)

75 (ACOUSTICAL TECHNOLOGY); 72 (COMPUTERS & DATA PROCESSING); 71  
(ELECTRONICS & COMMUNICATIONS); 92 (ENGINEERING MATHEMATICS); 90 (GENERAL  
ENGINEERING)

Abstract: **Analog encryption** is employed to insure communications security via communication paths having limited frequency bandwidth (**analog encryption** is called analog scrambling). Time domain and amplitude and frequency domain technique are used for analog scrambler...

Identifiers: **ANALOG ENCRYPTION** ; SCRAMBLING; LIMITED FREQUENCY BANDWIDTH; CONSTANT ENVELOPE SCRAMBLER; COMMUNICATION SECURITY; DATA ENCRYPTION STANDARD (DES)

4/5,K/8 (Item 2 from file: 8)  
DIALOG(R)File 8:EI Compendex(R)  
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01406934 E.I. Monthly No: EI8311092231 E.I. Yearly No: EI83015008

**Title: OVERVIEW OF ANALOGUE SIGNAL ENCRYPTION.**

Author: Kak, S. C.

Corporate Source: Louisiana State Univ, Dep of Electrical & Computer Engineering, Baton Rouge, La, USA

Source: IEE Proceedings, Part F: Communications, Radar and Signal Processing v 130 n 5 Aug 1983 p 399-404

Publication Year: 1983

CODEN: IPFPDU ISSN: 0143-7070

Language: ENGLISH

Journal Announcement: 8311

Abstract: Author reviews the subject of **analog encryption**. The rank correlation approach to the study of permutations is also reviewed. Some families of permutations that have been used in scrambling systems are described. The problems of **analog encryption**, as well as its scope, are analyzed. 21 refs.

Descriptors: \*CODES, SYMBOLIC--\*Decoding

Identifiers: **ANALOG ENCRYPTION** ; PERMUTATION FAMILIES

Classification Codes:

723 (Computer Software); 921 (Applied Mathematics)

72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS)

Abstract: Author reviews the subject of **analog encryption**. The rank correlation approach to the study of permutations is also reviewed. Some families of permutations that have been used in scrambling systems are described. The problems of **analog encryption**, as well as its scope, are analyzed. 21 refs.

Identifiers: **ANALOG ENCRYPTION** ; PERMUTATION FAMILIES

4/5,K/9 (Item 3 from file: 8)  
DIALOG(R)File 8:EI Compendex(R)  
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01212477 E.I. Monthly No: EIM8207-020627

**Title: ANALOG ENCRYPTION AND TRANSMISSION OF ANALOG SIGNALS.**

Author: Chethik, Frank

Corporate Source: Ford Aerosp & Commun Corp, Palo Alto, Calif, USA

Conference Title: International Telemetry Conference, ITC/USA/'81.

Conference Location: San Diego, Calif, USA Conference Date: 19811013

Sponsor: Int Found for Telem, Woodland Hills, Calif, USA; ISA, Research Triangle Park, NC, USA

E.I. Conference No.: 00368

Source: International Telemetry Conference (Proceedings) v 17 1981.

Publ by Int Found for Telem, Woodland Hills, Calif, USA. Available from ISA, Research Triangle Park, NC, USA p 105-121

Publication Year: 1981

CODEN: ITCOD6 ISBN: 0-87664-516-3

Language: English

Document Type: PA; (Conference Paper)

Journal Announcement: 8207



Descriptors: \*DATA TRANSMISSION

Identifiers: **ANALOG ENCRYPTION** SYSTEM; TRANSMISSION SYSTEM; ANALOG SIGNALS; PULSE AMPLITUDE MODULATION/FREQUENCY MODULATION; PULSECODE MODULATION/PHASE SHIFT KEYING; FADING CHANNEL SCENARIO; PERFORMANCE ANALYSIS; ENCRYPTION/DECRYPTION PROCESSES; SATELLITE LINKS; BANDWIDTH LIMITED CHANNEL; ENCRYPTION OR PRIVACY ALGORITHM PERFORMANCE

Classification Codes:

716 (Radar, Radio & TV Electronic Equipment); 718 (Telephone & Line Communications)

71 (ELECTRONICS & COMMUNICATIONS)

**Title:** ANALOG ENCRYPTION AND TRANSMISSION OF ANALOG SIGNALS.

Identifiers: **ANALOG ENCRYPTION** SYSTEM; TRANSMISSION SYSTEM; ANALOG SIGNALS; PULSE AMPLITUDE MODULATION/FREQUENCY MODULATION; PULSECODE MODULATION/PHASE SHIFT KEYING; FADING CHANNEL...

**4/5,K/10 (Item 1 from file: 94)**

DIALOG(R) File 94:JICST-EPlus

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00821692 JICST ACCESSION NUMBER: 89A0061878 FILE SEGMENT: JICST-E

Analog encryption .

OHJI MASAYUKI (1); NISHIZONO TOMOHIRO (1); NAKANISHI YOSHINOBU (2)

(1) NEC Engineering Ltd.; (2) NEC Corp.

Denshi Joho Tsushin Gakkai Zenkoku Taikai Koen Ronbunshu(Spring National Convention Record, the Institute of Electronics, Information and Communication Engineers), 1988, VOL.1988,NO.Autumn Pt. B-2, PAGE.B.2.180, FIG.2, REF.1

JOURNAL NUMBER: G0508ADY

UNIVERSAL DECIMAL CLASSIFICATION: 621.395

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Conference Proceeding

ARTICLE TYPE: Short Communication

MEDIA TYPE: Printed Publication

DESCRIPTORS: analog communication; public communication; cryptogram; cipher machine; echo suppression; voice communication; articulation(ratio)

BROADER DESCRIPTORS: communication system; method; telecommunication; equipment; acoustic characteristic; characteristic; speech quality; transmission performance; communication characteristic; degree

CLASSIFICATION CODE(S): ND11030P

Analog encryption .

**4/5,K/11 (Item 1 from file: 239)**

DIALOG(R) File 239:Mathsci

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01928362 MR 86j#94003

**Advances in cryptology.**

Proceedings of the workshop on the theory and application of cryptographic techniques (CRYPTO 84) held at the University of California, Santa Barbara, Calif., August 19--22, 1984. Edited by G. R. Blakley and David Chaum.

Contributors: Blakley, G. R.; Chaum, David

Publ: Springer-Verlag, Berlin-New York,

1985, ix+491 pp. ISBN: 3-540-15658-5

Series: Lecture Notes in Computer Science, 196.

Price: \$25.10.

Language: English

Document Type: Book; Proceedings

Journal Announcement: 1806

Advances in cryptology; Workshop: Theory and application of cryptographic techniques; Santa Barbara, Calif., 1984

Subfile: MR (Mathematical Reviews) AMS

Abstract Length: LONG (74 lines)

The 1983 workshop has been reviewed [MR 86f:94001].\

From the preface: ``Here are some major contributions to the literature on modern cryptography: the papers presented at CRYPTO 84. It is our pleasure to share them with everyone interested in this exciting and growing field.''

The forty papers in this collection include the following: S. C. Serpell, C. B. Brookson and B. L. Clark, A prototype encryption system using public key (pp. 3--9); Taher El Gamal, A public key cryptosystem and a signature scheme based on discrete logarithms (pp. 10--18); Neal R. Wagner and Marianne R. Magyarik, A public-key cryptosystem based on the word problem (pp. 19--36); H. Ong, C. P. Schnorr and A. Shamir, Efficient signature schemes based on polynomial equations (preliminary version) (pp. 37--46); Adi Shamir, Identity-based cryptosystems and signature schemes (pp. 47--53); Benny Chor and Ronald L. Rivest, A knapsack type public key cryptosystem based on arithmetic in finite fields (preliminary draft) (pp. 54--65); H. C. Williams [Hugh Cowie Williams], Some public-key crypto-functions as intractable as factorization (extended abstract) (pp. 66--70).

I. F. Blake, R. C. Mullin and S. A. Vanstone, Computing logarithms in  $(\mathbb{Z}/p\mathbb{Z})^*$  (pp. 73--82); Burt S. Kaliski, Wyner's analog encryption scheme: results of a simulation (pp. 83--94); Su Shing Chen, On rotation group and encryption of analog signals (pp. 95--100); Albert C. Leighton and Stephen M. Matyas, The history of book ciphers (pp. 101--113); J. A. Davis and D. B. Holdridge, An update on factorization at Sandia National Laboratories (p. 114); R. C. Fairfield, A. Matusevich and J. Plany, An LSI digital encryption processor (DEP) (pp. 115--143); Marc Davio, Yvo Desmedt, Jo Goubert, Frank Hoornaert and Jean-Jacques Quisquater, Efficient hardware and software implementations for the DES (pp. 144--146); Frank Hoornaert, Jo Goubert and Yvo Desmedt, Efficient hardware implementation of the DES (pp. 147--173); Norman Proctor, A self-synchronizing cascaded cipher system with dynamic control of error propagation (pp. 174--190).

Umesh V. Vazirani and Vijay V. Vazirani, Efficient and secure pseudorandom number generation (extended abstract) (pp. 193--202); R. C. Fairfield, R. L. Mortenson and K. B. Coulthart, An LSI random number generator (RNG) (pp. 203--230); S. C. Kothari, Generalized linear threshold scheme (pp. 231--241); G. R. Blakley and Catherine Meadows, Security of ramp schemes (pp. 242--268); Selim G. Akl and Henk Meijer, A fast pseudorandom permutation generator with applications to cryptology (pp. 269--275); Oded Goldreich, Shafi Goldwasser and Silvio Micali, On the cryptographic applications of random functions (extended abstract) (pp. 276--288); Manuel Blum and Shafi Goldwasser, An efficient probabilistic public-key encryption scheme which hides all partial information (pp. 289--299).

Benny Chor and Oded Goldreich, RSA/Rabin least significant bits are  $\frac{1}{2} + o(1)$  secure (extended abstract) (pp. 303--313); G. R. Blakley, Information theory without the finiteness assumption. I. Cryptosystems as group-theoretic objects (pp. 314--338); Alan G. Konheim, Cryptanalysis of ADFGVX encipherment systems (extended abstract) (pp. 339--341); Ernest F. Brickell, Breaking iterated knapsacks (pp. 342--358); Yvo Desmedt, Jean-Jacques Quisquater and Marc Davio, Dependence of output on input in DES: small avalanche characteristics (pp. 359--376); J. A. Reeds and J. L. Manferdelli, DES has no per round linear factors (pp. 377--389).

Gustavus J. Simmons, Authentication theory/coding theory (pp. 411--431); Tom Tedrick, Fair exchange of secrets (extended abstract) (pp. 434--438); Mordechai Yung, Cryptoprotocols: subscription to a public key, the secret blocking and the multiplayer mental poker game (extended abstract) (pp. 439--453); Shafi Goldwasser, Silvio Micali and Ronald L. Rivest, A ``paradoxical'' solution to the signature problem (p. 467); A. K. Leung and S. E. Tavares, Sequence complexity as a test for cryptographic systems (pp. 468--474); Charles H. Bennett and Gilles Brassard, An update on quantum cryptography (pp. 475--480); David Chaum, How to keep a secret alive: extensible partial key, key safeguarding, and threshold systems (pp. 481--485).

{The papers that appear to be in final form are being reviewed individually.}

Reviewer: Editors

Review Type: Table of contents

Descriptors: \*94-06 -Information and communication, circuits-Proceedings, conferences, etc. ; 68-06 -Computer science (For papers involving machine computations and programs in a specific mathematical area, see section --04 in that area)-Proceedings, conferences, etc.; 94A60 -Information and communication, circuits-Communication, information-Cryptography (See also 11T71)

...Vanstone, Computing logarithms in  $(\mathbb{Z}/n\mathbb{Z})^*$  (pp. 73--82); Burt S. Kaliski, Wyner's **analog encryption** scheme: results of a simulation (pp. 83--94); Su Shing Chen, On rotation group and encryption of...

4/5,K/12 (Item 1 from file: 696)

DIALOG(R)File 696:DIALOG Telecom. Newsletters  
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00539483

**Comsat Introduces Secure Satellite Telephone Service**

COMMUNICATIONS TODAY

June 4, 1997 DOCUMENT TYPE: NEWSLETTER

PUBLISHER: PHILLIPS BUSINESS INFORMATION

LANGUAGE: ENGLISH

WORD COUNT: 76

RECORD TYPE: FULLTEXT

Comsat Personal Communications has launched its encrypted Secure Telephone Unit service that encodes end-to-end voice, fax and data communications on the Planet 1 personal satellite

(c) PHILLIPS PUBLISHING INTERNATIONAL All Rts. Reserv.

COMPANY NAME(S): Comsat Personal Communications ; National Security Agency

TEXT:

... **analog encryption** devices, the company said. (Gary Sharpe, Comsat

Set	Items	Description
S1	29	(RGB OR RED()GREEN()BLUE)()LINE?
S2	27	S1 NOT PY>1999
S3	27	S2 NOT PD>19991020
S4	16	RD (unique items)
File	2:INSPEC	1969-2003/Sep W4 (c) 2003 Institution of Electrical Engineers
File	8:EI Compendex(R)	1970-2003/Sep W4 (c) 2003 Elsevier Eng. Info. Inc.
File	34:SciSearch(R)	Cited Ref Sci 1990-2003/Sep W4 (c) 2003 Inst for Sci Info
File	65:Inside Conferences	1993-2003/Oct W1 (c) 2003 BLDSC all rts. reserv.
File	94:JICST-EPlus	1985-2003/Sep W4 (c)2003 Japan Science and Tech Corp(JST)
File	103:Energy SciTec	1974-2003/Sep B2 (c) 2003 Contains copyrighted material
File	275:Gale Group Computer DB(TM)	1983-2003/Oct 07 (c) 2003 The Gale Group
File	434:SciSearch(R)	Cited Ref Sci 1974-1989/Dec (c) 1998 Inst for Sci Info
File	647:CMP Computer Fulltext	1988-2003/Sep W2 (c) 2003 CMP Media, LLC

4/5,K/1 (Item 1 from file: 2)

DIALOG(R) File 2:INSPEC

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5546788 INSPEC Abstract Number: B9705-4260-010

**Title: Filtered full-color thin-film electroluminescent device with ZnS:TbOF/ZnS:PrOF phosphor layers**

Author(s): Young-Jae Cho; Noma, M.; Hamakawa, Y.

Author Affiliation: Fac. of Eng. Sci., Osaka Univ., Japan

Journal: Sensors and Materials vol.9, no.1 p.25-34

Publisher: MYU,

Publication Date: 1997 Country of Publication: Japan

CODEN: SENMER ISSN: 0914-4935

SICI: 0914-4935(1997)9:1L.25:FFCT;1-M

Material Identity Number: C001-97001

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P); Experimental (X)

**Abstract:** A filtered full-color ZnS:TbOF/ZnS:PrOF thin-film electroluminescent (EL) device has been developed. Emission spectra of the device include the three primary-color spectral components, i.e., red, green and blue ( **RGB** ) **lines** . With the use of these spectral components, an attempt has been made to develop a full-color display by means of filtered color emission technology. Chromaticity coordinates of the green emission and the red emission from the filtered device are almost equal to those of a cathode ray tube (CRT), while chromaticity coordinates of the blue emission shift markedly toward those of green. (12 Refs)

Subfile: B

**Descriptors:** electroluminescent displays; phosphors; praseodymium compounds; terbium compounds; thin film devices; zinc compounds

**Identifiers:** filtered full-color thin-film electroluminescent device; ZnS:TbOF/ZnS:PrOF phosphor layers; emission spectra; primary-color spectral components; **RGB lines** ; spectral components; filtered color emission technology; chromaticity coordinates; green emission; displays; blue emission shift; ZnS:TbOF-ZnS:PrOF

**Class Codes:** B4260 (Electroluminescent devices); B7260 (Display technology and systems); B2220E (Thin film circuits); B4220M (Phosphors)

**Chemical Indexing:**

ZnS:TbOF-ZnS:PrOF int - ZnS:PrOF int - ZnS:TbOF int - ZnS int - Pr int - Tb int - Zn int - F int - O int - S int - ZnS:PrOF ss - ZnS:TbOF ss - PrOF ss - TbOF ss - Pr ss - Tb ss - Zn ss - F ss - O ss - S ss - ZnS bin - Zn bin - S bin - PrOF dop - TbOF dop - Pr dop - Tb dop - F dop - O dop  
(Elements - 2,3,5,2,3,5,6)

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...Abstract: spectra of the device include the three primary-color spectral components, i.e., red, green and blue ( **RGB** ) **lines** . With the use of these spectral components, an attempt has been made to develop a full-color...

...Identifiers: **RGB lines** ;

4/5,K/2 (Item 2 from file: 2)

DIALOG(R) File 2:INSPEC

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5147084 INSPEC Abstract Number: B9602-7230G-005, C9602-5530-003

**Title: True RGB line scan camera for color machine vision applications**

Author(s): Lemstrom, G.

Author Affiliation: TVI, Helsinki, Finland

Journal: Proceedings of the SPIE - The International Society for Optical Engineering Conference Title: Proc. SPIE - Int. Soc. Opt. Eng. (USA) vol.2353 p.494-502

Publisher: SPIE-Int. Soc. Opt. Eng,

Publication Date: 1994 Country of Publication: USA

CODEN: PSISDG ISSN: 0277-786X

SICI: 0277-786X(1994)2353L.494:TLSC;1-3

Material Identity Number: C574-94276

U.S. Copyright Clearance Center Code: 0 8194 1688 6/94/\$6.00

Conference Title: Intelligent Robots and Computer Vision XIII: Algorithms and Computer Vision

Conference Sponsor: SPIE

Conference Date: 31 Oct.-2 Nov. 1994. Conference Location: Boston, MA, USA

Language: English Document Type: Conference Paper (PA); Journal Paper (JP)

Treatment: Applications (A); Practical (P)

Abstract: The design and technical capabilities of a true RGB 3-CCD chip color line scan camera are presented. The camera was developed for accurate color monitoring and analysis in industrial applications. Color separation is made possible with a tri-chromatic RGB beam splitter. Three CCD linear arrays are precisely mounted onto the output surfaces of the prism and the outputs of each CCD are exactly matched pixel by pixel. The beam splitter prism can be tailored to separate other spectral components than the standard RGB. A typical CCD can detect between 200-100 nm. Either two or three spectral regions can be separated using a beam splitter prism. The camera is totally digital and has a 16-bit parallel computer interface to communicate with a signal processing board. The open architecture of the camera makes it possible for the customer to design a board with some special functions handling the preprocessing of the data. The camera can also be equipped with a high speed CPU-board with enough of local memory to do some image processing inside the camera before sending the data forward. The camera has been used in real industrial applications. (0 Refs)

Subfile: B C

Descriptors: CCD image sensors; computer vision; image colour analysis; open systems; optical elements; video cameras

Identifiers: **RGB line scan camera**; color machine vision; CCD image sensors; color monitoring; Color separation; tri-chromatic RGB beam splitter; CCD linear arrays; beam splitter prism; 16-bit parallel interface; open architecture; image processing; 200 to 100 nm

Class Codes: B7230G (Image sensors); C5530 (Pattern recognition and computer vision equipment); C5260B (Computer vision and image processing techniques); C3240K (Image sensors)

Numerical Indexing: wavelength 1.0E-07 to 2.0E-07 m

Copyright 1996, IEE

**Title: True RGB line scan camera for color machine vision applications**

Identifiers: **RGB line scan camera...**

4/5,K/3 (Item 3 from file: 2)

DIALOG(R) File 2:INSPEC

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03964041 INSPEC Abstract Number: B91055540, C91058231

**Title: EMI design techniques for CRT based VGA subsystem PCB layouts**

Author(s): Urkumyan, N.

Journal: EMC Test & Design vol.2, no.3 p.45-6

Publication Date: May-June 1991 Country of Publication: USA

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: The FCC EMI consideration should begin at the schematics level, where various voltage sources and grounds should be identified and labeled. A design recommendation is given for the VGA analog interface signals going to the outside world from the circuit under design. It is highly recommended to insert ferrite beads in the analog **RGB lines** that are exposed. (0 Refs)

Subfile: B C

Descriptors: cathode-ray tube displays; computer graphic equipment; electromagnetic compatibility; ferrite applications; printed circuit design

Identifiers: video graphics array; EMI design techniques; VGA subsystem PCB layouts; FCC; schematics; voltage sources; ferrite beads; **RGB lines**

Class Codes: B2210B (Printed circuit layout and design); B5230 (Electromagnetic compatibility and interference); B7260 (Display technology and systems); C5540 (Terminals and graphic displays); C7410D (Electronic

. engineering)

...Abstract: world from the circuit under design. It is highly recommended to insert ferrite beads in the analog **RGB** lines that are exposed.

...Identifiers: **RGB** lines

4/5,K/4 (Item 4 from file: 2)

DIALOG(R) File 2:INSPEC

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03313428 INSPEC Abstract Number: B89019134

**Title: 20-inch Hi-vision TV monitor**

Author(s): Segawa, K.; Onishi, S.; Kawamoto, T.; Sato, Y.; Konishi, H.; Shikata, N.

Journal: National Technical Report vol.34, no.5 p.62-5

Publication Date: Oct. 1988 Country of Publication: Japan

CODEN: NTROAV ISSN: 0028-0291

Language: Japanese Document Type: Journal Paper (JP)

Treatment: Practical (P); Product Review (R)

Abstract: The 20-inch display monitor has been developed as a high-vision system terminal receiver for high-fidelity reproduction of high-definition pictures. The monitor performs high-fidelity reproduction of **RGB** and component signals (Y,P/sub B/,P/sub R/) from cameras, VTRs and still-picture discs by its under-scanning function (BLK 3.77 mu sec). At the same time, the monitor makes possible **RGB** linear signal reception from 31.5 to 33.75 kHz by the employment of an automatic horizontal synchronizing circuit. Furthermore, high luminance (a peak luminance of 120 ft-L) and high resolution (800 TV-lines or more) have been obtained by the employment of a new CRT. In addition, considering the variety of application, a metal cabinet which can be rack-mounted has been employed.

(1 Refs)

Subfile: B

Descriptors: colour television receivers

Identifiers: Hi-vision TV monitor; display monitor; high-vision system terminal; high-fidelity reproduction; high-definition pictures; component signals; cameras; VTRs; still-picture discs; under-scanning function; **RGB** linear signal; automatic horizontal synchronizing circuit; luminance; high resolution; CRT; 20 in; 31.5 to 33.75 kHz

Class Codes: B6420D (Radio and television receivers)

Numerical Indexing: size 5.1E-01 m; frequency 3.15E+04 to 3.375E+04 Hz

...Abstract: its under-scanning function (BLK 3.77 mu sec). At the same time, the monitor makes possible **RGB** linear signal reception from 31.5 to 33.75 kHz by the employment of an automatic horizontal synchronizing...

...Identifiers: **RGB** linear signal

4/5,K/5 (Item 5 from file: 2)

DIALOG(R) File 2:INSPEC

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03252001 INSPEC Abstract Number: A88132138, B88072207

**Title: Color image scanner with an RGB linear image sensor**

Author(s): Takeuchi, R.; Tsumura, M.; Tadauchi, M.; Shio, H.

Author Affiliation: Hitachi Res. Lab., Hitachi Ltd., Ibaraki, Japan

Journal: Journal of Imaging Technology vol.14, no.3 p.68-72

Publication Date: June 1988 Country of Publication: USA

CODEN: JAPEDL ISSN: 0098-7298

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: A new color linear image sensor has been developed. It uses three linear image sensor arrays with red, green, and blue filters on each sensor array. This color sensor makes it possible to scan each primary color simultaneously. In applications to a full color document scanner, an A4 size full color document can be read in only 30 sec with 400 pels/in.

definition and 64 separable gray levels for each primary color. (3 Refs)  
Subfile: A B  
Descriptors: electrophotography; image sensors  
Identifiers: color linear image sensor; filters  
Class Codes: A0768 (Photography, photographic instruments and techniques  
); B4210 (Photoconducting materials and properties); B7230G (Image sensors  
)  
**Title: Color image scanner with an RGB linear image sensor**

4/5,K/6 (Item 6 from file: 2)  
DIALOG(R)File 2:INSPEC  
(c) 2003 Institution of Electrical Engineers. All rts. reserv.

02996144 INSPEC Abstract Number: B87070430  
**Title: Multiscan-type 14-inch CRT display monitor**  
Author(s): Segawa, K.; Kawamoto, T.; Iwashita, M.; Ito, K.; Aoki, M.;  
Urata, T.  
Author Affiliation: Video Equipment Div., Matsushita Electron. Ind. Co.  
Ltd., Osaka, Japan  
Journal: National Technical Report vol.33, no.2 p.256-60  
Publication Date: April 1987 Country of Publication: Japan  
CODEN: NTROAV ISSN: 0028-0291  
Language: Japanese Document Type: Journal Paper (JP)  
Treatment: Practical (P); Product Review (R)  
Abstract: This multiscan-type CRT display monitor features complete and  
continuous automatic synchronization with the horizontal signal frequency,  
without switching by means of relays, semiconductors, etc. The monitor has  
the following three functions: display of NTSC composite video signals  
(VTR, camera, etc.); display of various personal computers' TTL signals;  
(8/16 colors, horizontal: 640 dots, vertical: 200 approximately 480 lines);  
and the display of **RGB linear** signals corresponding to Captain,  
teletext, etc. and superimposition of video/RGB signals. In addition, the  
monitor has a selective function for connection of the above three signals  
simultaneously, thus making it adaptable to various systems. (0 Refs)  
Subfile: B  
Descriptors: cathode-ray tube displays; monitoring  
Identifiers: multiscan-type CRT display monitor; automatic  
synchronization; horizontal signal frequency; relays; semiconductors; NTSC  
composite video signals; VTR; camera; **RGB linear** signals; Captain;  
teletext; 14 in  
Class Codes: B7260 (Display technology and systems)  
Numerical Indexing: size 3:6E-01 m

...Abstract: TTL signals; (8/16 colors, horizontal: 640 dots, vertical:  
200 approximately 480 lines); and the display of **RGB linear** signals  
corresponding to Captain, teletext, etc. and superimposition of video/RGB  
signals. In addition, the monitor has...  
...Identifiers: **RGB linear** signals

4/5,K/7 (Item 1 from file: 34)  
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2003 Inst for Sci Info. All rts. reserv.

05529447 Genuine Article#: WE681 Number of References: 12  
**Title: Filtered full-color thin-film electroluminescent device with  
ZnS:TbOF/ZnS:PrOF phosphor layers**  
Author(s): Cho YJ; Noma M; Hamakawa Y  
Corporate Source: OSAKA UNIV,FAC ENGN SCI/OSAKA 560//JAPAN/; SHARP CO  
LTD,LIQUID CRYSTAL DISPLAY LABS/TENRI/NARA 632/JAPAN/; RITSUMEIKAN  
UNIV,FAC SCI & ENGN/SHIGA 525//JAPAN/  
Journal: SENSORS AND MATERIALS, 1997, V9, N1, P25-34  
ISSN: 0914-4935 Publication date: 19970000  
Publisher: MYU K K, SCIENTIFIC PUBLISHING DIV, 2-32-3 SENDAGI, BUNKYO-KU,  
TOKYO 113, JAPAN  
Language: English Document Type: ARTICLE



Geographic Location: JAPAN

Journal Subject Category: INSTRUMENTS & INSTRUMENTATION; MATERIALS SCIENCE

Abstract: A filtered full-color ZnS:TbOF/ZnS:PrOF thin-film electroluminescent (EL) device has been developed. Emission spectra of the device include the three primary-color spectral components, i.e., red, green and blue ( RGB ) lines .With the use of these spectral components, an attempt has been made to develop a full-color display by means of filtered color emission technology. Chromaticity coordinates of the green emission and the red emission from the filtered device are almost equal to those of a cathode ray tube (CRT), while chromaticity coordinates of the blue emission shift markedly toward those of green.

Descriptors--Author Keywords: filtered full-color thin-film EL device ; ZnS:TbOF/ZnS:PrOF phosphor layer ; RGB spectral components

Cited References:

ABE Y, 1989, V28, P1373, JPN J APPL PHYS PT 1  
CHASE EW, 1969, V40, P2512, J APPL PHYS  
HAMAKAWA Y, 1988, V3, P31, OPTOELECTRONICS DEVI  
HIRABAYASHI K, 1987, V26, P1472, JPN J APPL PHYS PT 1  
NOMA M, 1992, V117, P1030, J CRYST GROWTH  
NOMA M, 1991, 5 INT C 2 6 COMP WEL  
OISHI Y, 1983, P353, 15 C SOL STAT DEV MA  
ONO YA, 1989, V66, P5564, J APPL PHYS  
SUYAMA T, 1982, V21, P383, JPN J APPL PHYS S  
TAKAHASHI K, 1992, V117, P979, J CRYST GROWTH  
TANAKA S, 1987, V51, P1661, APPL PHYS LETT  
TANAKA S, 1986, V25, P225, JPN J APPL PHYS

...Abstract: spectra of the device include the three primary-color spectral components, i.e., red, green and blue ( RGB ) lines .With the use of these spectral components, an attempt has been made to develop a full-color...

4/5,K/8 (Item 1 from file: 65)

DIALOG(R)File 65:Inside Conferences

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00657452 INSIDE CONFERENCE ITEM ID: CN006393834

True RGB line -scan camera for color machine vision applications [ 2353-56]

Lemstroem, G. F.

CONFERENCE: Intelligent robots and computer vision XIII: algorithms and computer vision-13th Conference

PROCEEDINGS- SPIE THE INTERNATIONAL SOCIETY FOR OPTICAL ENGINEERING, 1994; ISSUE 2353 P: 494-502

SPIE, 1994

ISSN: 0361-0748 ISBN: 0819416886

LANGUAGE: English DOCUMENT TYPE: Conference Papers

CONFERENCE EDITOR(S): Casasent, D. P.

CONFERENCE SPONSOR: SPIE

CONFERENCE LOCATION: Boston, MA

CONFERENCE DATE: Oct 1994 (199410) (199410)

BRITISH LIBRARY ITEM LOCATION: 6823.100000

DESCRIPTORS: intelligent robots; computer vision; algorithms; SPIE

True RGB line -scan camera for color machine vision applications [ 2353-56]

4/5,K/9 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPlus

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00434641 JICST ACCESSION NUMBER: 87A0312513 FILE SEGMENT: JICST-E

Special issue on display technologies. II Multiscan-type 14-inch CRT display monitor.

SEGAWA KAZUTOSHI (1); KAWAMOTO TETSURO (1); IWASHITA MASA HARU (1); ITO KEN  
(1); AOKI MUNEO (1); URATA TOSHI HARU (1)  
(1) Matsushita Electric Industrial Co., Ltd.  
Nat'l Tech Rep, 1987, VOL.33, NO.2, PAGE.256-260, FIG.7, TBL.2  
JOURNAL NUMBER: G0474AAH ISSN NO: 0028-0291 CODEN: NTROA  
UNIVERSAL DECIMAL CLASSIFICATION: 681.327.2 621.385:621.397  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Commentary  
MEDIA TYPE: Printed Publication

ABSTRACT: This multiscan-type CRT display monitor features complete and continuous automatic synchronization with the horizontal signal frequency, without switching by means of relays, semiconductors, etc. The monitor has the following three functions: (1) Display of NTSC composite video signals (VTR, camera, etc.) (2) Display of various personal computers' TTL signals (8/16 colors horizontal : 640 dots, vertical : 200-480 lines) (3) Display of **RGB linear** signals corresponding to CAPTAIN, teletext, etc., and superim-position of video/RGB signals In addition, the monitor has a selective function for connection of the above three signals simultaneously, thus making it adaptable to various systems. (author abst.)

DESCRIPTORS: CRT display; color display; control circuit; terminal equipment; input output unit; personal computer; NTSC

BROADER DESCRIPTORS: display device; equipment; circuit; computer peripheral equipment; digital computer; computer; hardware; color television; television

CLASSIFICATION CODE(S): JC04050U; NC06030Q

...ABSTRACT: personal computers' TTL signals (8/16 colors horizontal : 640 dots, vertical : 200-480 lines) (3) Display of **RGB linear** signals corresponding to CAPTAIN, teletext, etc., and superim-position of video/RGB signals In addition, the monitor...

4/5,K/10 (Item 1 from file: 103)

DIALOG(R) File 103:Energy SciTec

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04490382 LLNL-97-M98050923; EDB-99-071061

**Title: Color spaces in digital video**

Author(s)/Editor(s): Gaunt, R.

Corporate Source: Lawrence Livermore National Lab., CA (United States)

Sponsoring Organization: DOE; USDOE, Washington, DC (United States)

Conference Title: Special Interest Group on Computer Graphics (SIGGRAPH)  
'97 conference

Conference Location: Los Angeles, CA (United States) Conference Date: 3-8  
Aug 1997

Publication Date: 1 May 1997

(8 p)

Report Number(s): UCRL-JC-127331 CONF-9708191--

Order Number: DE98050923

Contract Number (DOE): W-7405-ENG-48

Document Type: Report; Conference Literature

Language: English

File Description: PDF

Contact: CAROL L. DUNCAN, PUBLICATION SERVICES GROUP LEADER, (510)  
423-2297, LLNL, DUNCAN8[AT]LLNL.GOV

Journal Announcement: EDB9916

Availability: OSTI; NTIS; GPO Dep.

Distribution: (Report):H (MF):4 MN-705

Subfile: ETD (Energy Technology Data Exchange); NTS (NTIS).

US DOE Project/NonDOE Project: P

Country of Origin: United States

Country of Publication: United States

Abstract: Whether it's photography, computer graphics, publishing, or video; each medium has a defined color space, or gamut, which defines the extent that a given set of RGB colors can be mixed. When converting

from one medium to another, an image must go through some form of conversion which maps colors into the destination color space. The conversion process isn't always straight forward, easy, or reversible. In video, two common analog composite color spaces are Y'tjv (used in PAL) and Y'IQ (used in NTSC). These two color spaces have been around since the beginning of color television, and are primarily used in video transmission. Another analog scheme used in broadcast studios is Y', R'-Y', B'-Y' (used in Betacam and Mll) which is a component format. Y', R'-Y', B'-Y' maintains the color information of RGB but in less space. From this, the digital component video specification, ITU-Rec. 601-4 (formerly CCIR Rec. 601) was based. The color space for Rec. 601 is symbolized as Y'CbCr. Digital video formats such as DV, D1, Digital-S, etc., use Rec. 601 to define their color gamut. Digital composite video (for D2 tape) is digitized analog Y'UV and is seeing decreased use. Because so much information is contained in video, segments of any significant length usually require some form of data compression. All of the above mentioned analog video formats are a means of reducing the bandwidth of RGB video. Video bulk storage devices, such as digital disk recorders, usually store frames in Y'CbCr format, even if no other compression method is used. Computer graphics and computer animations originate in RGB format because RGB must be used to calculate lighting and shadows. But storage of long animations in RGB format is usually cost prohibitive and a 30 frame-per-second data rate of uncompressed RGB is beyond most computers. By taking advantage of certain aspects of the human visual system, true color 24-bit RGB video images can be compressed with minimal loss of visual information. For example, humans 'see' more white-to-black (luminance) detail than red, green, or blue color detail. Also, the eye is most sensitive to green colors. Taking advantage of this, both composite and component video allocates more bandwidth for the luma (Y') signal than the chroma signals. Y'611 is composed of 59% green', 30% red', and 11% blue' (prime symbol denotes gamma corrected colors). This luma signal also maintains compatibility with black and white television receivers. Component digital video converts R'G'B' signals (either from a camera or a computer) to a monochromatic brightness signal Y' (referred here as luma to distinguish it from the CIE luminance linear- light quantity), and two color difference signals Cb and Cr. These last two are the blue and red signals with the luma component subtracted out. As you know, computer graphic images are composed of red, green, and blue elements defined in a linear color space. Color monitors do not display

**RGB linearly** . A linear RGB color space image must be gamma corrected to be displayed properly on a CRT. Gamma correction, which is approximately a 0.45 power function, must also be employed before converting an RGB image to video color space. Gamma correction is defined for video in the international standard: ITU-Rec. BT.709-4. The gamma correction transform is the same for red, green, and blue. The color coding standard for component digital video and high definition video symbolizes gamma corrected luma by Y', the blue difference signal by Cb (Cb = B' - Y'), and the red color difference signal by Cr (Cr = R' - Y'). Component analog HDTV uses Y'PbPr. To reduce conversion errors, clip in R'G'B', not in Y'CbCr space. View video on a video monitor, computer monitor phosphors are wrong. Use a large word size (double precision) to avoid warp around, the0232n round the results to values between 0 and 255. And finally, recall that multiplying two 8-bit numbers results in a 16-bit number, so values need to be clipped to 8-bits.

Descriptors: COLOR; COMPUTER GRAPHICS; DIGITAL SYSTEMS; TELEVISION

Broader Terms: OPTICAL PROPERTIES; ORGANOLEPTIC PROPERTIES; PHYSICAL PROPERTIES

Subject Categories: 426000\* -- Engineering -- Components, Electron Devices & Circuits -- (1990-)  
990200 -- Mathematics & Computers

...Abstract: of red, green, and blue elements defined in a linear color space. Color monitors do not display **RGB linearly** . A linear RGB color space image must be gamma corrected to be displayed properly on a CRT...

4/5,K/11 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
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02077249 SUPPLIER NUMBER: 19529886 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**A room with several views. (RGB Spectrum's Superview 1000 and 2000, video windowing machines) (Product Information)**  
Schwartz, Deborah  
HP Professional, v11, n6, p14(1)  
June, 1997  
ISSN: 0896-145X LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 517 LINE COUNT: 00045

SPECIAL FEATURES: illustration; photograph; table  
COMPANY NAMES: RGB Spectrum--Products  
DESCRIPTORS: Product Description/Specification; Video Processing Equipment  
PRODUCT/INDUSTRY NAMES: 3573290 (Computer Peripherals NEC)  
SIC CODES: 3577 Computer peripheral equipment, not elsewhere classified  
TRADE NAMES: RGB Spectrum SuperView 1000 (Video processing equipment)--Design and construction; RGB Spectrum SuperView 2000 (Video processing equipment)--Design and construction  
FILE SEGMENT: CD File 275

... is controlled over an RS-232 port. It connects between the host computer and its monitor over **RGB lines**, and combines the video and computer signals downstream of the computer frame buffer. Its architecture offers a...

4/5,K/12 (Item 2 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
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01694848 SUPPLIER NUMBER: 15567897 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Fishing for graphics workstations. (includes a related article on performance metrics and a discussion with DEC executives on its UNIX strategy) (Buyers Guide)**  
Schoeniger, Eric  
DEC Professional, v13, n7, p20(10)  
July, 1994  
DOCUMENT TYPE: Buyers Guide ISSN: 0744-9216 LANGUAGE: ENGLISH  
RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 6764 LINE COUNT: 00553

ABSTRACT: Descriptions of the top-end graphics workstations from DEC, HP and Silicon Graphics Inc (SGI) in each of three price ranges address the major features and other criteria important in selecting such workstations. These include performance, networking capabilities, upgradability, warranties, service and support, trade-in allowances and graphics applications. The latter should be the first criterium to evaluate in selecting a workstation, specifically whether it supports the graphics applications that the user wants to use. Graphics workstations described in the \$10,000 range are DEC's \$10,495 3000 300X AXP, HP's \$9,920 HP 9000 712/80 and SGI's \$6,995 Indy. Ones in the \$25,000 range are the \$24,185 DEC 3000 600 AXP, \$26,605 HP 9000 715/100 and \$25,500 SGI Indigo2. The \$50,000-plus workstations discussed are the \$168,502 DEC 3000 800 AXP, \$152,500 HP 9000 735/125 and \$168,800 SGI Onyx MIPS-based supercomputer.

SPECIAL FEATURES: illustration; photograph; table  
COMPANY NAMES: Digital Equipment Corp.--Products; Hewlett-Packard Co.--Products; Silicon Graphics Inc.--Products  
DESCRIPTORS: Workstations; Supercomputer; Graphics System; Computer Design; Hardware Selection; HP PA-RISC-Based System; MIPS-Based System; Alpha-Based System

SIC CODES: 3571 Electronic computers

TICKER SYMBOLS: HWP; DEC; SGI

TRADE NAMES: DEC Alpha 3000 300X AXP (Alpha-based system)--Design and construction; HP Apollo 9000 700 712/80 (HP PA-RISC-based system)--Design and construction; Silicon Graphics Indy (Graphics system)--Design and construction; DEC Alpha 3000 600 AXP (Alpha-based system)--Design and construction; HP Apollo 9000 700 715/100 (HP PA-RISC-based system)--Design and construction; Silicon Graphics Indigo2 (Graphics system)--Design and construction; DEC Alpha 3000 800 AXP (Alpha-based system)--Design and construction; HP Apollo 9000 700 735/125 (HP PA-RISC-based system)--Design and construction; Silicon Graphics Onyx (MIPS-based system)--Design and construction

FILE SEGMENT: CD File 275

... record and edit two-channel digital audio tracks.

Graphics features include alpha blending, an accumulation buffer, antialiased **RGB lines** and points, texture mapping, fog, lighting features, arbitrary clipping planes, depth cueing, subpixel positioning, pan and zoom...compression ratios from 2:1 to 100:1.

Graphics features include alpha blending, an accumulation buffer, antialiased **RGB lines** and points, full-scene antialiasing, texture mapping, fog, and such lighting features as spot lighting, two-sided...

**4/5,K/13 (Item 3 from file: 275)**

DIALOG(R)File 275:Gale Group Computer DB(TM)

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01548636 SUPPLIER NUMBER: 13029295 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**TitleMan renders Type 1 fonts, EPS to video. (Digital F/X Inc.'s TitleMan application) (Brief Article) (Product Announcement)**

McManu, Neil

MacWEEK, v6, n43, p50(1)

Dec 7, 1992

DOCUMENT TYPE: Product Announcement ISSN: 0892-8118 LANGUAGE:

ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 247 LINE COUNT: 00019

COMPANY NAMES: Digital F/X Inc.--Product introduction

DESCRIPTORS: Product Introduction; Font Package; Rendering; Graphics software

SIC CODES: 7372 Prepackaged software

TRADE NAMES: TitleMan (Image processing software)--Product introduction

OPERATING PLATFORM: Apple Macintosh; PostScript

FILE SEGMENT: CD File 275

... display and frame-grabs and an external rackmounted chassis that inputs black-burst reference and outputs RGB ( **red , green , blue** ), **linear** key and sync.

The system connects to a transcoder for YUV output, to an encoder for composite...

**4/5,K/14 (Item 4 from file: 275)**

DIALOG(R)File 275:Gale Group Computer DB(TM)

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01213357 SUPPLIER NUMBER: 04599322 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Video adapter allows use of monitor with any video standard in any mode. (EGA Wonder) (Hardware Review) (evaluation)**

Rosch, Winn L.

PC Week, v4, n1, p91(3)

Jan 6, 1987

DOCUMENT TYPE: evaluation ISSN: 0740-1604 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 1848 LINE COUNT: 00143

ABSTRACT: The EGA Wonder video adapter produced by ATI Technologies is an advanced video board that can be used with all of the most popular video monitors, including: red-green-blue color, enhanced color, composite monochrome, and composite color. The Hercules Graphics Card is also compatible with the EGA Wonder, which also will represent high-resolution graphic arts on TTL monochrome displays. Although comparable capabilities are available from products sold by the majority of manufacturers of Enhanced Graphics Adapter (EGA) monitors, the EGA Wonder goes one step further by enabling signals emitted from one type of monitor to be shown on a different type of monitor. While the EGA Wonder offers one superior mode - EGA graphics on conventional RGB displays - the quality of the images is poor because they appear foreshortened, filled with flicker, and fuzzy. Overall, the \$399 EGA Wonder video adapter, which runs on IBM PC-compatible microcomputers and TTL monochrome, CGA- or EGA-compatible or a composite monitors and provides 132-column display modes, is a recommended buy.  
CAPTIONS: Hardware profile: EGA Wonder: ATI Technologies Inc. (table)

SPECIAL FEATURES: illustration; photograph; table  
COMPANY NAMES: ATI Technologies Inc.--Products  
DESCRIPTORS: Video Systems; Monitors; Standard; Evaluation; Personal Computers; Compatible Hardware; Add-In/On Devices; Boards/Cards  
TRADE NAMES: ATI Technologies EGA Wonder (Circuit board)--evaluation  
FILE SEGMENT: CD File 275

... Wonder merely maps each 350-per-screen EGA line to one of the 400-per-screen interlaced **RGB lines**. Fifty lines on the screen are left blank, split between the top and bottom.  
Composite monitors present...

4/5,K/15 (Item 1 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2003 CMP Media, LLC. All rts. reserv.

01163021 CMP ACCESSION NUMBER: EET19980601S0006  
**Voltage-feedback op amps claim high slew rates** (Analog ICs & Power)  
ELECTRONIC ENGINEERING TIMES, 1998, n 1010, PGP3  
PUBLICATION DATE: 980601  
JOURNAL CODE: EET LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: Product File  
WORD COUNT: 197  
TEXT:

Tucson, Ariz. - Burr-Brown Corp. has introduced the OPA680 and OPA2680, which are, respectively, single- and dual-wideband, unity gain stable, voltage-feedback op amps. They are said to feature a new internal architecture that provides high slew rates (1,800 V/ microseconds) and full-power bandwidth (220 MHz at G=2), as well as a new output stage architecture that is said to provide high output current (+190 mA/-150 mA) with minimal voltage headroom.  
COMPANY NAMES (DIALOG GENERATED): Burr Brown Corp

The op amps are designed for single-supply analog-to-digital converter input driver and **RGB line**-driver applications. Using a single 5-V supply, they can deliver a 1- to 4-V output...

4/5,K/16 (Item 2 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
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00631639 CMP ACCESSION NUMBER: EET19890116S4439  
**WELL POSITIONED WITH INTERNAL DRAM CAPABILITY: Micron makes a move into Mac world**  
LORING WIRBEL  
ELECTRONIC ENGINEERING TIMES, 1989, n 521, 14

PUBLICATION DATE: 890116  
JOURNAL CODE: EET        LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: 521PG14  
WORD COUNT: 641  
TEXT:

Boise, Idaho - Some new faces will be present at this week's MacWorld Expo in San Francisco to sell add-in hardware for the Macintosh and the anticipated SE/MacIIx hybrid that Apple will be announcing on Thursday. Among the new vendors of color board and add-in memory products will be memory specialist Micron Technology Inc., SuperMac Technology and RasterOps.

... scan rate is 34 kHz. It combines DRAMs with decode logic and three Intech video DACs for **RGB lines**. The converters meet at a single RGB output port that can be used with a variety of...